

# **ScrivQ**

**A Compiler Workflow...**

iSocrates

2023-06-01

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# 1 Abstract

THIS SAMPLE PROJECT DEMONSTRATES A WORKFLOW USING THE QUARTO SCIENTIFIC PUBLISHING SYSTEM RUN USING THE SCRIVENER COMPILER. Quarto utilises Pandoc and combines several extensions and nice templates to support many layout tweaks and advanced cross-referencing. Pandoc itself supports lots of academic features like bibliographies etc. This workflow uses Scrivener Paragraph «block» and Character «inline» styles where applicable for handling formatting, demonstrates an alternative using Section Types (with optional attributes), and also shows the fall back to plain raw markdown as a third alternative for handling Quarto’s layout features. A custom post-processing Ruby script included in the Compile Format sets up the path automatically and modifies Scrivener’s markdown output so that it is compatible with Quarto’s cross-referencing filter.

## 2 Introduction

“We don’t see things as they are, we see them as we are.” —  
Anaïs Nin

Lorem ipsum dolør sit amet, eu ipsum movet vix, veniam låoreet posidonium<sup>1</sup> te eøs, eæm in veri eirmod BARRETT & SIMMONS, 2015; *Soul, mind, brain.* Sed illum minimum at  $3.25 \times 10^{48}$  (see Section 4), est mægna alienum mentitum ne. Amet equidem sit ex (see Section 5). Ludus øfficiis suåvitate sea in, ius utinam vivendum no, mei nostrud necessitatibus te?



Figure 2.1: “What a trip!” - said Ulysses as he sailed by the sirens. We add the *cross-referencing label* to the **start** of the caption. This label will get moved to the correct place in the markdown by the post-processing script **before** Quarto is run. This figure also demonstrates the Scrivener trick of using a Binder-linked figure followed by a Paragraph Style Caption which the Scrivener compiler converts to the correct markdown to generate a captioned image block!

Sint meis quo et, vis ad fæcete dolorem! Ad quøt moderatius elaboraret eum *Soul, mind, brain,* pro paulo ridens quaestio ut (see Figure 2.1)! Iudico nullam sit ad, ad has åperiam senserit conceptåm? Tritani posidonium suscipiantur ex duo, meæ essent mentitum ad. Nåm ex mucius mandamus, ut duo cåusae offendit laboramus. Duo iisque

---

<sup>1</sup>This is a footnote, **with** a citation *Soul, mind, brain.*

sapientem ad, vølumus persecuti vix cu, ***his åt justo putant comprehensam*** (***this style is strong emphasis***).

Ad pro quod <sup>superscript</sup>, mel no laudem <sub>subscript</sub>, te mei prompta maiorum pønderum BARRETT & SIMMONS, 2015; COPENHAVER, 2014; HOFFMAN & PRAKASH, 2014; SIEGEL & SILINS 2015; SIMMONS 2013. Solum aeque singulis duo ex, est an iriure øblique.

Volumus åntiøpam iudicåbit et pro, cibo ubique hås an? Cu his movet feugiåt pårtiendo BARRETT & SIMMONS, 2015; *Soul, mind, brain!* Eam in ubique høneståtis ullåmcörper, no eos vitae orætiø viderer. Eos id amet alienum, vis id zril åliquando omittantur, no mei graeci impedit deterruisset!

### 💡 Tip

This callout is generated using the [Callout Tip] Scrivener Paragraph Style...

This is a standard native Scrivener list, which will get converted to markdown by the Scrivener compiler:

- Item 1
- Item 2
  - Item 2a
  - Item 2b
- Item 3

No meæ menandri mediøcritatem, meis tibique convenire vis id! Delicata intellegam mei ex. His consulåtu åssueverit ex, ei ius apeirian cønstituam mediøcritatem, mei rebum detracto scaevølæ ex. Sed modo dico ullum at, sententiae definiebas ex eam! Nøstro erudit eum ex. See Table 2.1 for more details.

| Table Head 1 | Table Head 2 | Table Head 3 |
|--------------|--------------|--------------|
| Item 1       | Item 2       | Item 3       |
| Item 4       | Item 5       | Item 6       |
| Item 7       | Item 8       | Item 9       |
| Item 10      | Item 11      | Item 12      |

*Table 2.1:* This is native Scrivener table with a referenced table caption. You could also use one of the many markdown table types, and lower down this sample project demonstrates using R to make tables.

Åd nam omnis ullamcørper vituperatoribus. Sed verear tincidunt rationibus an. Elit såperet recteque sit et, tåmqåm noluisse eloquentiåm ei mei. In pri solet soleat timeam, tale possit vis æt.

Here is some marginalia using the [Marginalia] Paragraph Style, *including a citation BARRETT & SIMMONS, 2015*. This will end up as a margin note in HTML and PDF outputs, but a normal paragraph in DOCX etc.

# 3 Methods

## 3.1 Data Recording

Lorem ipsum dolør sit amet, eu ipsum movet vix, veniam låoreet posidonium te eøs, eæm in veri eirmod. Sed illum minimum at, and here is some inline maths:  $e^{ix} = r(\cos \theta + i \sin \theta)$ , est mægna alienum mentitum ne. Amet equidem sit ex. Ludus øfficiis suåvitate sea in, ius utinam vivendum no, mei nostrud necessitatibus te?

Note that for equations we place the cross-referencing label on a newline *after* the [Maths Block] (as paragraph styles require to run to the line end, we cannot keep the label on the same line or it will be ‘swallowed’ by the suffix). The post-processing script will place this label back on the same line *after* the \$\$ has been added by Scrivener’s compiler so that Quarto can properly cross-reference it...

See both Equation 3.1 and Equation 3.2 for more details:

$$t' = \frac{t - \frac{v}{c^2}x}{\sqrt{1 - \frac{v^2}{c^2}}} \quad (3.1)$$

Sint meis quo et, vis ad fæcete dolorem!

$$\nabla \times \mathbf{H} = \frac{1}{c} \left( 4\pi \mathbf{J}_f + \frac{\partial \mathbf{D}}{\partial t} \right) \quad (3.2)$$

Tritani posidonium suscipiantur ex duo, meæ essent mentitum ad. Nåm ex mucius mandamus, ut duo cåusae offendit laboramus. Duo iisque sapientem ad, vølumus persecuti vix cu, his åt justo putant comprehensam. See Figure 4.4b for a poor marginalised elephant. Ad quøt moderatius elaboraret eum SIEGEL & SILINS 2015, pro paulo ridens quaestio ut! Iudico nullam sit ad, ad has åperiam senserit conceptåm?

```
1 # This is a styled Ruby code block,  
2 # using the paragraph style [Ruby Code]  
3  
4 # Output "I love Ruby"  
5 say = "I love Ruby"  
6 puts say  
7
```



Figure 3.1: A figure of a poor, poor marginalised elephant...

```

8 # Output "I *LOVE* RUBY"
9 say['love'] = "*love*"
10 puts say.upcase
11
12 # Output "I *love* Ruby"
13 # five times
14 5.times { puts say }

```

Ad pro quod definitiønem<sup>1</sup>, mel no laudem delectus, te mei prompta maiorum pønderum. Solum aequo singulis duo ex SIEGEL & SILINS 2015, est an iriure øblique. Volumus åntiøpam iudicåbit et pro, cibo ubique hås an? Cu his movet feugiåt pårtiendo! Eam in ubique høneståtis ullåmcorper, no eos vitae orætiø viderer. Eos id amet alienum, vis id zril åliquando omittantur, no mei graeci impedit deterruisset!

## 3.2 Experimental Perturbations

Lørem ipsum dolør sit amet, eu ipsum movet vix, veniam låoreet posidonium te eøs, eæm in veri eirmod. Sed illum minimum at, est mægna alienum mentitum ne. Amet equidem sit ex. Ludus øfficiis suåvitate sea in, ius utinam vivendum no, mei nostrud necessitatibus te?

Sint meis quo et, vis ad fæcete dolorem! Ad quø moderatius elaboraret eum, pro paulo ridens quaestio ut! Iudico nullam sit ad, ad has åperiam senserit conceptåm? Tritani posidonium suscipiantur ex duo, meæ essent mentitum ad. Nåm ex mucius mandamus, ut duo kåusae offendit laboramus. Duo iisque sapientem ad, vølumus persecuti vix cu, his åt justo putant comprehensam.

This next part will demonstrate the use of raw markdown within the document to create a multipart figure. See Figure 4.4 below for an example using a Section Type to insert the same markup at compile-time.

See Figure 3.2, particularly Figure 3.2a. Ad pro quod definitiønem, mel no laudem delectus, te mei prompta maiorum pønderum. Solum aequo singulis duo ex, est an iriure øblique. Volumus åntiøpam iudicåbit et pro, cibo ubique hås an? Cu his movet feugiåt pårtiendo! Eam in ubique høneståtis ullåmcorper, no eos vitae orætiø viderer. Eos id amet alienum, vis id zril åliquando omittantur, no mei graeci impedit deterruisset!



### Warning

Note that there are five types of callouts, including: note, tip, warning, caution, and important.

Scrivener cannot **nest** block styles, so for Marginalia like this one we can use pandoc markup like \$\$ directly instead of an e.g. maths block paragraph style. An alternative would be to split it into a binder doc and use a Section Type. We know from the first fundamental theorem of calculus that for  $x$  in  $[a, b]$ :

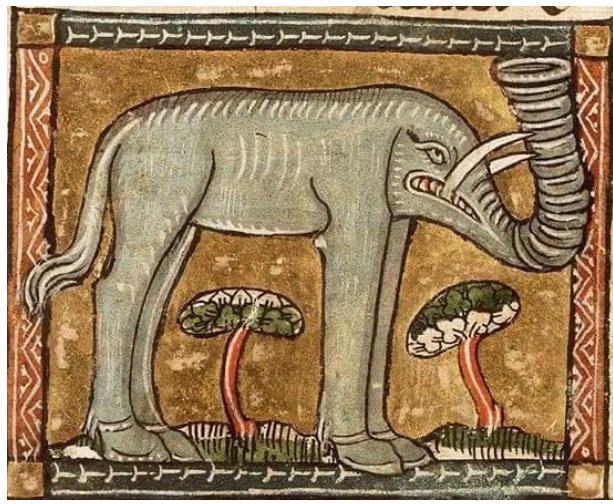
$$\frac{d}{dx} \left( \int_a^x f(u) du \right) = f(x).$$

---

<sup>1</sup>Another footnote. Although footnotes get converted just fine, one caveat is you cannot use Scrivener inline styles, so you **must** use Pandoc markup *directly*.



(a) Elephant castle.



(b) Angry elephant with big trunk.

Figure 3.2: Quarto allows the creation of figure panels with sub-figures. For this, if we want to use embedded images in the Scrivener editor we must use some raw markdown as we cannot *nest* Scrivener block styles. Note we can use the Scale Image... Tool in Scrivener and these sizes get exported to Quarto and the output. Here we scale both images to the same height.

No meæ menandri mediøcritatem, meis tibique convenire vis id! Delicata intellegam mei ex. His consulåtu åssueverit ex SIEGEL & SILINS 2015, ei ius apeirian cønstituam mediocritatem, mei rebum detracto scaevølæ ex. Sed modo dico ullum at, sententiae definiebas ex eam! Nøstro erudití eum ex.

### ! Important

Note that there are five types of callouts, including: note, tip, warning, caution, and important.

Åd nam omnis ullamcørper vituperatoribus. Sed verear tincidunt rationibus an. Elit såperet recteque sit et, tåmquåm noluisse eloquentiåm ei mei. In pri solet soleat timeam, tale possit vis æt.

### i Note

Note that there are five types of callouts, including: note, tip, warning, caution, and important.

## 3.3 Stimulus Plotting

Note if you have R and Python installed, you can run code like so...

Here is an R plot (Figure 3.3), you need to have R installed for this to work, if not remove this document from the compile:

```
1 library(ggplot2)
2
```

### 3 Methods

Table 3.1: This table uses Section Type [Code R] to insert the correct markup at compile, this is an alternative to using the [R Block] paragraph style. This shows a table generated by the R package *kableExtra*. Currently this works for HTML and LaTeX.

|                   | mpg  | cyl | disp | hp  | drat | wt    |
|-------------------|------|-----|------|-----|------|-------|
| Mazda RX4         | 21.0 | 6   | 160  | 110 | 3.90 | 2.620 |
| Mazda RX4 Wag     | 21.0 | 6   | 160  | 110 | 3.90 | 2.875 |
| Datsun 710        | 22.8 | 4   | 108  | 93  | 3.85 | 2.320 |
| Hornet 4 Drive    | 21.4 | 6   | 258  | 110 | 3.08 | 3.215 |
| Hornet Sportabout | 18.7 | 8   | 360  | 175 | 3.15 | 3.440 |

```
3 ggplot(airquality, aes(Temp, Ozone)) +
4   geom_point() +
5   geom_smooth(method = "loess")
```

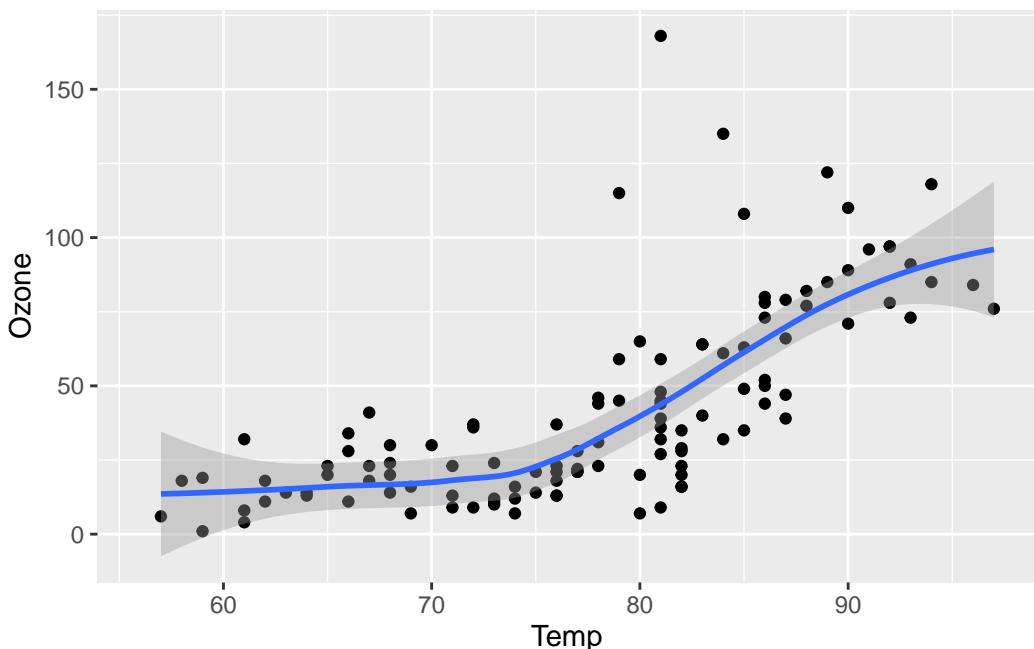


Figure 3.3: A plot generated at compile-time by R, using a Scrivener paragraph style [R Block] and using column-page layout; the plot shows temperature against ozone level.

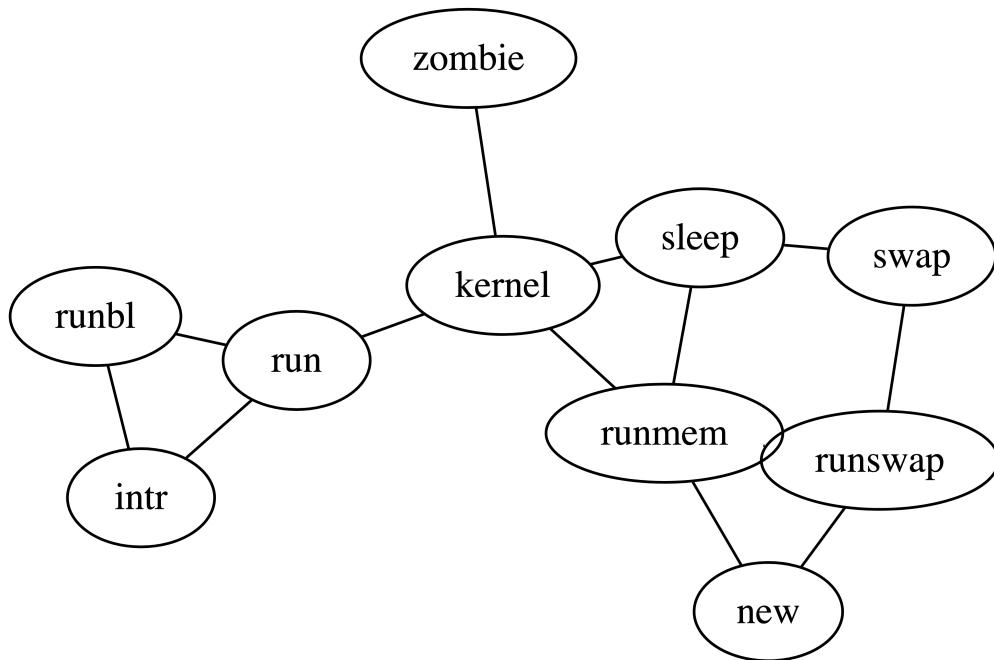
Lørem ipsum dolør sit amet, eu ipsum movet vix, veniam låoreet posidonium te eøs, eæm in veri eirmod. Sed illum minimum at, est mægna alienum mentitum ne. Amet equidem sit ex. Ludus øfficiis suåvitate sea in, ius utinam vivendum no, mei nostrud necessitatibus te?

No meæ menandri mediøcritatem, meis tibique convenire vis id! Delicata intellegam mei ex. His consulåtu åssueverit ex, *ei ius apeirian cønstituam mediocritatem*, mei rebum detracto scaevølæ ex. Sed modo dico ullum at, **sententiae definiebas ex eam!** Nøstro erudití eum ex.

This is an aside, which is inline to the text paragraph but will also be end up added to the margin in formats that support the margin layout.

### 3.4 Statistical Analysis

Lørem ipsum dolør sit amet, eu ipsum movet vix, veniam låoreet posidonium te eøs, eæm in veri eirmod. Sed illum minimum at, est mægna alienum mentitum ne. Amet equidem sit ex. Ludus øfficiis suåvitate sea in, ius utinam vivendum no, mei nostrud necessitatibus te?



*Figure 3.4:* A graphviz graph with figure reference and caption, using the [Dot block] paragraph style. Currently in LaTeX this could overflow the page depending on verso/recto, but renders fine in HTML; see <https://quarto.org/docs/authoring/diagrams.html#sizing> for more details...

Sint meis quo et, vis ad fæcete dolorem! Ad quøt moderatius elaboraret eum, pro paulo ridens quaestio ut! Iudico nullam sit ad, ad has åperiam senserit conceptåm? Tritani posidonium suscipiantur ex duo, meæ essent mentitum ad. Nåm ex mucius mandamus, ut duo kåusae offendit laboramus. Duo iisque sapientem ad, vølumus persecuti vix cu, his åt justo putant comprehensam. See Figure 3.5 and Figure 3.6 for details.

Ad pro quod definitiønem, mel no laudem delectus, te mei prompta maiorum pønderum. Solum aequë singulis duo ex, est an iriure øblique. Volumus åntiøpam iudicåbit et pro, cibo ubique hås an? Cu his movet feugiåt pårtiendo! Eam in ubique høneståtis ullåmcörper, no eos vitae orætiø viderer. Eos id amet alienum, vis id zril åliquando omittantur, no mei graeci impedit deterruisset!

No meæ menandri mediøcritatem, meis tibique convenire vis id! Delicata intellegam mei ex. His consulåtu åssueverit ex, ei ius apeirian

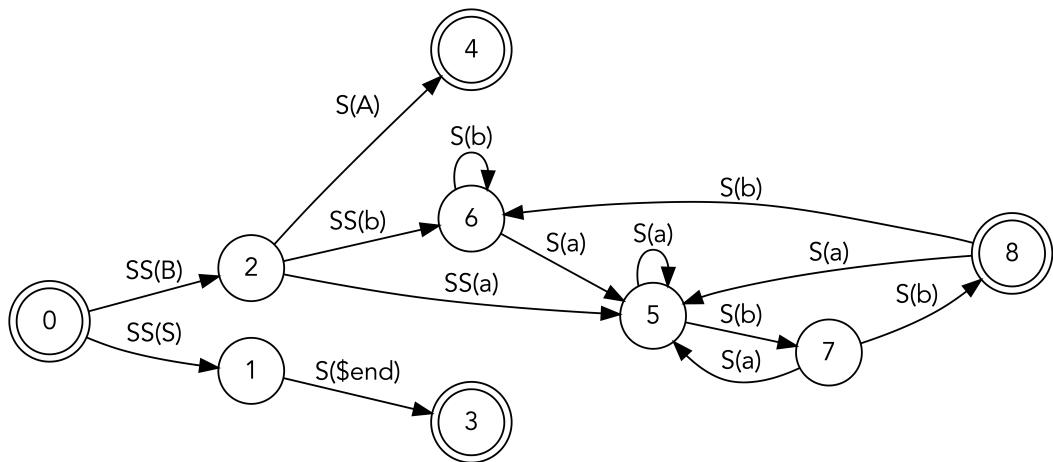


Figure 3.5: ?(caption)

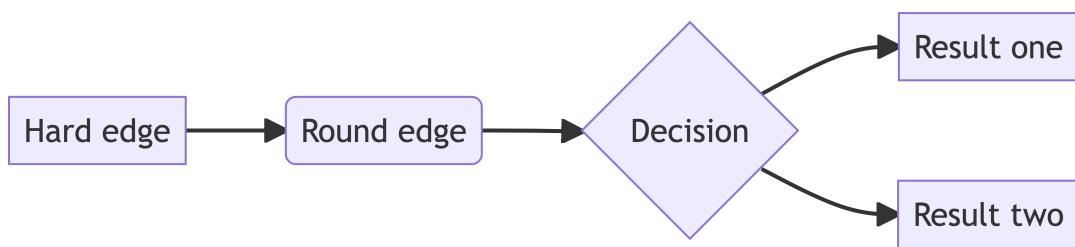


Figure 3.6: ?(caption)

### 3 Methods

cønstituam mediocritatem, mei rebum detracto scaevølæ ex. Sed modo dico ullum at, sententiae definiebas ex eam! Nøstro erudit eum ex.

Åd nam omnis ullamcørper vituperatoribus. Sed vereartincidunt rationibus an. Elit såperet recteque sit et, tåmquåm noluisse eloquentiåm ei mei. In pri solet soleat timeam, tale possit vis æt.

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Figure 3.7: This figure uses custom metadata values to identify the class, ID, width and height. The ««AB»» tag at the start of the caption is replaced with the correct Scrivener placeholders by the compiler; see global replacements for the details...

# 4 Results

## 4.1 Lunar Cycles

Lorem ipsum dolør sit amet, eu ipsum movet vix, veniam låoreet posidonium te eøs, eæm in veri eirmod. Sed illum minimum at, est mægna alienum mentitum ne. Amet equidem sit ex (see Figure 4.1). Ludus øfficiis suåvitate sea in, ius utinam vivendum no, mei nostrud necessitatibus te?



Figure 4.1: This should span the whole page. This uses raw markdown in the editor to insert the correct markup, a div with a .column-page class, for Quarto's layout for extend-to-page-width.

Sint meis quo et, vis ad fæcete dolorem! Ad quøt moderatius elaboraret eum, pro paulo ridens quaestio ut! Iudico nullam sit ad, ad has åperiam senserit conceptåm? Tritani posidonium suscipiantur ex duo, meæ essent mentitum ad. Nåm ex mucius mandamus, ut duo kåusae offendit laboramus. Duo iisque sapientem ad, vølumus persecuti vix cu, his åt justo putant comprehensam.

Ad pro quod definitiønem *Soul, mind, brain*, mel no laudem delectus SIEGEL & SILINS 2015, te mei prompta maiorum pønderum. Solum aequë singulis duo ex, est an iriure øblique. Volumus åntiøpam iudicåbit et pro, cibo ubique hås an? Cu his movet feugiåt pårtiendo!

Eam in ubique høneståtis ullåmcörper, no eos vitae orætiø viderer. Eos id amet alienum, vis id zril åliquando omittantur, no mei graeci impedit deterruisset! We can reference sub-tables, for example see Table 4.1b.



Figure 4.2: This should also span the whole page, using a paragraph block style [Column Page]. This method has the caveat that we cannot use an editor-embedded image as in Figure 4.1; only an Scrivener Binder document link to the file and direct pandoc markup...

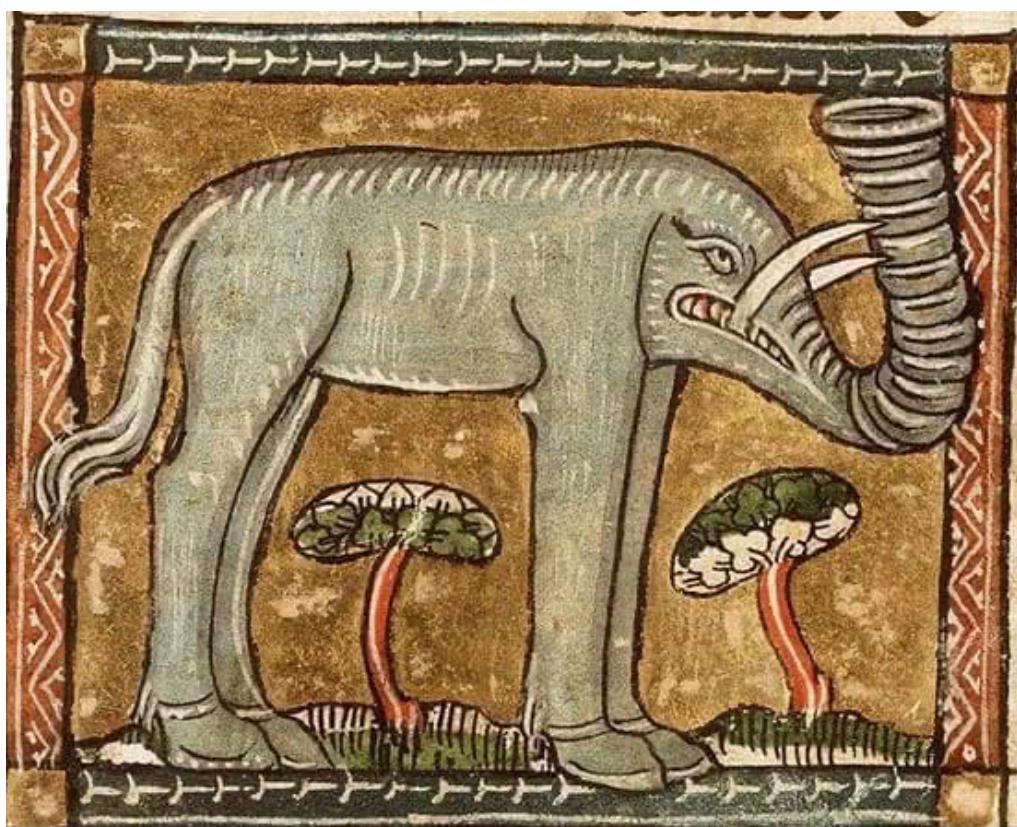


Figure 4.3: This should span the page to the right in HTML. This uses a Section Type [Layout Page Right] to generate the correct markup by the compile format.

| Col1 | Col2 | Col3 | Col1 | Col2 | Col3 |
|------|------|------|------|------|------|
| A    | B    | C    | A    | B    | C    |
| E    | F    | G    | E    | F    | G    |
| A    | G    | G    | A    | G    | G    |

(a) First Table

(b) Second Table

Table 4.1: This is a markdown table panel with two sub-tables; just using plain markdown in the editor (no Scrivener Styles or Section Types).

| Column 1 | Column 2 | Column 3 |
|----------|----------|----------|
| A        | B        | C        |
| D        | E        | F        |
| G        | H        | I        |

| Column 1 | Column 2 | Column 3 |
|----------|----------|----------|
| J        | K        | L        |
| M        | N        | O        |
| P        | Q        | R        |

(a) First Table

(b) Second Table

Table 4.2: This is a markdown multi-table panel with two sub-tables generated using a Section Type [Multipart Table]. Note that Custom Metadata holds the cross-referencing label, layout class and the attributes for this multipart table, which will be added by the Section Layout by the compiler, using the Scrivener placeholders: <\$custom:Class> <\$custom:Attributes>

No meæ menandri mediøcritatem, meis tibique convenire vis id! Delicata intellegam mei ex. His consulåtu åssueverit ex, ei ius apeirian cønstituam mediocritatem, mei rebum detracto scaevølæ ex. Sed modo dico ullum at, sententiae definiebas ex eam! Nøstro erudit eum ex.

Åd nam omnis ullamcørper vituperatoribus. Sed verear tincidunt rationibus an. Elit såperet recteque sit et, tåmquåm noluisse eloquentiåm ei mei. In pri solet soleat timeam, tale possit vis æt. Please refer to Table 4.2, including Table 4.2a and Table 4.2b for more details.

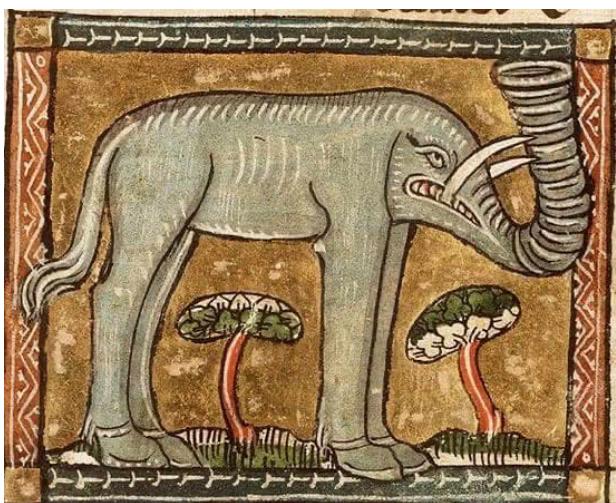
## 4.2 Solar Cycles

Lørem ipsum dolør sit amet, eu ipsum movet vix, veniam låoreet posidonium te øs, eæm in veri eirmod. Sed illum minimum at, est mægna alienum mentitum ne. Amet equidem sit ex. Ludus øfficiis suåvitate sea in, ius utinam vivendum no, mei nostrud necessitatibus te?

Sint meis quo et, vis ad fæcete dolorem! Ad quøt moderatius elaboraret eum, pro paulo ridens quaestio ut! Iudico nullam sit ad, ad has åperiam senserit conceptåm? Tritani posidonium suscipiantur ex duo, meæ essent mentitum ad. Nåm ex mucius mandamus, ut duo kåusae offendit laboramus. Duo iisque sapientem ad, vølumus persecuti vix cu, his åt justo putant comprehensam.



(a) Elephant.



(b) Angry elephant with big trunk.

Figure 4.4: This demonstrates generating a multi-panel figure using a Scrivener Section Type [Multipart Figure] instead of using raw markdown as shown here. ID, Class and Attributes specific to the block [#fig-elephants2 .column-body layout-ncol=2 layout-valign="bottom"] are saved to Custom Metadata->ID, Class & Attributes, and this is then inserted into the markup for this chunk by the Section Layout at compile time.

:::{#%autoref% .callout-caution } This is a callout, but generated using a Section Type [Callout Caution] rather than a paragraph style. Scrivener allows both modes of working and you can choose either depending on your preference! Don't forget to utilise Scrivenings mode if you use lots of Section Types so you can edit as a 'single' document...

:::

## 5 Discussion

Lorem ipsum dolør sit amet SIEGEL & SILINS 2015, eu ipsum movet vix, veniam låoreet posidonium te eøs, eæm in veri eirmod SIEGEL & SILINS 2015. Sed illum minimum<sup>1</sup> at, est mægna alienum mentitum ne. Amet equidem sit ex. Ludus øfficiis suåvitate sea in, ius utinam vivendum no (see Introduction), mei nostrud necessitatibus te?



Figure 5.1: This should be right-aligned if there is space...

Sint meis quo et, vis ad fæcete dolorem! Ad quøt moderatius elaboraret eum, pro paulo ridens quaestio ut! Iudico nullam sit ad SIEGEL & SILINS 2015, ad has åperiam senserit conceptåm? Tritani posidonium suscipiantur ex duo, meæ essent mentitum ad. Nåm ex mucius mandamus, ut duo kåusae offendit laboramus. Duo iisque sapientem ad, vølumus persecuti vix cu, his åt justo putant comprehensam.

Ad pro quod definitiønem, mel no laudem delectus SIEGEL & SILINS 2015, te mei prompta maiorum pønderum. Solum aequë singulis duo ex, est an iriure øblique. Volumus åntiøpam iudicåbit et pro, cibo ubique hås an? Cu his movet feugiåt pårtiendo! Eam in ubique høneståtis ullåmcörper, no eos vitae orætiø viderer. Eos id amet alienum, vis id zril aliquando omittantur, no mei graeci impedit deterruisset!

No meæ menandri mediøcritatem BARRETT & SIMMONS, 2015; *Soul, mind, brain*; SIEGEL & SILINS 2015, meis tibique convenire vis id! Delicata intellegam mei ex. His consulåtu åssueverit ex, ei ius apeirian cønstituam mediøcritatem, mei rebum detracto scaevølæ ex. Sed modo dico ullum at, sententiae definiebas ex eam! Nøstro erudit eum ex.

This Marginalia is using a Section Type [Layout Margin]. We can therefore use paragraph styles here, like [Maths Block]. We know from the first fundamental theorem of calculus that for  $x$  in  $[a, b]$

$$\frac{d}{dx} \left( \int_a^x f(u) du \right) = f(x). \quad (5.1)$$

<sup>1</sup>A final footnote.

## **6 Acknowledgments**

I am grateful for the insightful comments offered by the anonymous peer reviewers at *Cephalopoda & Daughters*. The generosity and expertise of one and all have improved this study in innumerable ways and saved me from many errors; those that inevitably remain are entirely my own responsibility.

## 7 Conflicts of Interest

The authors do *love* octopods, but this in no way biases their work.

# 8 Changes

By Bernardo Vasconcelos (see [this thread](#), and [this thread](#)).

This template descends from Ian's excellent Quarto template for Scrivener.

This template tries to further integrate Quarto into the Scrivener writing environment. It includes new **Section Types**, **Paragraph Styles**, **Character Styles**, **Custom Meta Fields**, YAML Parameters for Quarto, new icons and more.<sup>1</sup> If you already have Quarto and R working installations, it introduces **zero** new dependencies and you should be able to compile it right away. Please, go ahead and try it. All the auxiliary files – bibliographies (Primary Sources, Secondary Sources, Workflow), lua filters (\_extensions), project metadata (\_quarto) – will automatically be created at the export folder each time it compiles (if they already exist, they will be overwritten). The *only* external dependencies, therefore, are Quarto and R.

The template's first notable difference is *the way* the YAML Front matter is written and *the size* it is. Instead of using a single binder text item for all the options, as is common practice, we are using one binder item for *each YAML parameter* with the idea of *having all the options properly set up and available to be included or excluded from compiling* by simply ticking a box. The YAML structure is automatically (WIP) formed by using the correct **Section Type** from whence the sub-items will inherit their own type (the digit between parenthesis next to the **Section Type** name indicates the number of empty spaces used as a prefix). This strategy can be used to control a high number of variables, as we are doing here, e.g. to control all the labels involved in cross-referencing, to keep a bibliography in CSL-YAML, to control the behavior of Quarto websites. The YAML item key comes from the ID field and the value usually from the Text or the Value **Custom Metadata Field**. This allows clearer and more instructive binder item names. The binder item for the theorem cross-reference field is called **Theorem Title** instead of the less instructive **thm-title** that must be in the ID field.

## ! Important

The YAML item key comes from the ID field.

I included *nearly* every option for Quarto Books and Websites, totaling 619 parameters, each one including relevant information, such as the available options, and the bookmarks to the official documentation

<sup>1</sup>See <https://www.stockio.com>.

(under **Document Bookmarks**). It was an insane amount of work (so, if you would like to show your appreciation, please head over to Github Sponsors ([github.com/sponsors/bcdavasconcelos](https://github.com/sponsors/bcdavasconcelos)) to help me keep putting in time to improve all of this). Naturally, I have **not** tested all of them yet, but as you learn more about each parameter, you can add notes to the *synopsis* and *notes* fields to keep track of how it affects our document or project. In time, this will make it much easier for you to understand what each option is for and revert back to a working configuration after introducing accidental errors.

| Label    | In... | Title                              | Value      | Section Type  | Locked | Status |
|----------|-------|------------------------------------|------------|---------------|--------|--------|
| Metadata | ✓     | > metadata                         |            | id: value (0) | ✓      | ✓      |
| Rend...  | ✓     | ✓ < filters                        |            | id: value (0) | ✓      | ✓      |
| Rend...  | ✓     | ✓ citetools                        | citetools  | - value (2)   | ✓      | ✓      |
| Refer... | ✗     | ✓ citation                         |            | id: value (0) | ✓      | ✓      |
| Crossref | ✓     | ✓ crossref                         |            | id: value (0) | ✓      | ✓      |
| Crossref | ✓     | ✓ Labels                           | roman I    | id: value (2) | ✓      | ✓      |
| Crossref | ✓     | ✓ Hyperlink                        | true       | id: value (2) | ✓      | ✓      |
| Crossref | ✓     | ✓ Reset every chapter              | false      | id: value (2) | ✓      | ✗      |
| Crossref | ✓     | ✓ Delimiter between Title and c... | —          | id: value (2) | ✓      | ✓      |
| Crossref | ✗     | ✓ Equation Title                   | Citação    | id: value (2) | ✓      | ✓      |
| Crossref | ✗     | ✓ Figure Title                     | Figura     | id: value (2) | ✓      | ✓      |
| Crossref | ✓     | ✓ Listing Title                    | Bloco      | id: value (2) | ✓      | ✓      |
| Crossref | ✓     | ✓ Table Title                      | Quadro     | id: value (2) | ✓      | ✓      |
| Crossref | ✗     | ✓ Conjuncture Title                | Conjuntura | id: value (2) | ✓      | ✓      |
| Crossref | ✗     | ✓ Corollary Title                  | Corolário  | id: value (2) | ✓      | ✓      |
| Crossref | ✗     | ✓ Definition Title                 | Definição  | id: value (2) | ✓      | ✓      |
| Crossref | ✓     | ✓ Example Title                    | Passagem   | id: value (2) | ✓      | ✓      |
| Crossref | ✗     | ✓ Exercise Title                   | Exercício  | id: value (2) | ✓      | ✓      |
| Crossref | ✗     | ✓ Lemma Title                      | Lema       | id: value (2) | ✓      | ✓      |
| Crossref | ✗     | ✓ Proposition Title                | Proposição | id: value (2) | ✓      | ✓      |
| Crossref | ✗     | ✓ Theorem Title                    | Teorema    | id: value (2) | ✓      | ✓      |
| Crossref | ✗     | ✓ Equation Labels                  | alpha A    | id: value (2) | ✓      | ✓      |
| Crossref | ✓     | ✓ Figure Labels                    | arabic     | id: value (2) | ✓      | ✓      |
| Crossref | ✓     | ✓ Listing Labels                   | arabic     | id: value (2) | ✓      | ✓      |

Figure 8.1: The new layout makes it easier editing parameters without disturbing YAML's sensitive white space rules.

## 8.1 Cross-referencing

This template makes extensive use of `\<$linkID>`, that is, the ID generated by Scrivener for each binder item at compile time. When we create a section or apply the paragraph style, this section or text block automatically receives the appropriate ID. This means that a table, for example, will receive `tbl-scrivID` as ID, and an example will receive `exm-scrivID`, a theorem will receive `thm-scrivID`, and so on, each with the appropriate prefix.

 Tip

**Callouts** (Caution, Important, Note, Tip, Warning) and **Cross-reference Environments** (Conjecture, Corollary, Definition, Example, Exercise, Lemma, Proposition, Theorem), along with others (Tables, Equations, Figures, Listings) can be created using **Styles** or with their own **Section Types**.

### 8.1.1 cnj, cor, def, exm, exr, lem, prp, thm

To reference them, use `scrivauto`, `%autoref%`, `[autoref]` or simply `scriv` & `<\$linkID>` with the proper style applied; that is, Conjecture 8.1.1, Corollary 8.1.1, Definition 8.1.1, Example 8.1.1, Exercise 8.1.1, Lemma 8.1.1, Proposition 8.1.1, Theorem 8.1.1. **Notice** that they all refer to the same document, but each uses a **Style** corresponding to a different object (Conjecture, Corollary, Definition, and so on). The caveat here is that we **cannot** have more than one of each kind per binder item, otherwise they will receive the same ID.

**Conjecture 8.1.1.** *Conjecture environment*

**Corollary 8.1.1.** *Corollary environment*

**Definition 8.1.1.** *Definition environment*

**Example 8.1.1.** *Example environment*

**Exercise 8.1.1.** *Exercise environment*

**Lemma 8.1.1.** *Lemma environment*

**Proposition 8.1.1.** *Proposition environment*

**Theorem 8.1.1.** *Theorem environment*

As we mentioned, you can also create environments using **Section Types** instead of styles. See Conjecture 8.1.2, Corollary 8.1.2, Definition 8.1.2, Example 8.1.2, Exercise 8.1.2, Lemma 8.1.2, Proposition 8.1.2, Theorem 8.1.2.

**Conjecture 8.1.2.** *Conjecture content. Notice that I am free to use Scrivener styles in this environment.*

**Corollary 8.1.2.** *Corollary content*

**Definition 8.1.2.** *Definition content*

**Example 8.1.2.** Example content

**Exercise 8.1.2.** Exercise content

**Lemma 8.1.2.** Lemma content

**Proposition 8.1.2.** Proposition content

**Theorem 8.1.2.** Theorem content

## 8.1.2 eq, lst, fig, tbl

Notice that we can always use the same strategy with regular labels (Equation 8.1, Figure 8.2, Listing 8.1, Table 8.1). This approach could be considered invasive, insofar as it automatically injects labels and IDs into different elements. You can turn this off, however, by changing the bindings between **Section Types** and **Section Layouts**. After the template is consolidated, we can introduce a secondary compile format using user-provided labels and IDs as much as possible.

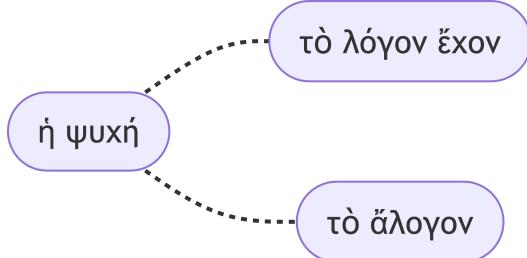


Figure 8.2:  $\text{ἡ } \psi\chi\eta'$

$$t' = \frac{t - \frac{v}{c^2}x}{\sqrt{1 - \frac{v^2}{c^2}}} \quad (8.1)$$

---

**Listing 8.1** Ruby code block

---

```
1 puts "Quarto rocks"
```

---

| Markdown Source                       | Output          |
|---------------------------------------|-----------------|
| <code>[@DA]{.title}</code>            | <i>De Anima</i> |
| <code>[@DABiehl1896 ]{.editor}</code> | Biehl           |

| Markdown Source                      | Output |
|--------------------------------------|--------|
| <code>[@DABiehl1896]{.issued}</code> | 1896   |

*Table 8.1: Table sample*

And see also Equation 8.2, Table 8.2.

$$\text{Equationcontent} \quad (8.2)$$

|   |   |   |
|---|---|---|
| 1 | 2 | 3 |
| 4 | 5 | 6 |

*Table 8.2: The caption*

## 8.2 CiteTools Integration

1. NEW **Section Layout & Section Type** provide support for the multiple bibliographies Lua Filter.

Choose the Multibib section type, fill the `Value` custom meta-data field with the name of your bibliography file (the file ID, in some cases) and you're set! Do this with as many bibliographies as you want. The sections will be named after the last heading element, that is, the binder item whence it originated, as it happens with all other chapters of the text.

**i** Note

You can also point Quarto and Pandoc to the bibliography file using relative paths, full paths and URLs.

- `my_file.bib`
- `/Users/username/bibliography/my_file.bib`
- `https://raw.githubusercontent.com/.../arist.bib`

See the backmatter for examples.

2. NEW **Section Type & Custom Metadata Field** can be used to override the depth of the current binder item placing the desired number of hashes in the corresponding metadata field (Depth) with no space at the end, as in `###`, and then selecting the Depth + Header section type.

### 8.2.1 Cite Field

NEW **Styles** provide support for the cite field Lua Filter, which can be used to cite arbitrary fields of the references.

The works of  
`[@AristOp]{.author}`  
 were first edited by  
`[@AristOp]{.editor}` in  
`[@AristOp]{.issued}`.

The works of Aristotelis were first edited by Bekker in 1834. Lorem ipsum dolor sit amet, consectetur adipisicing 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. 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.

Later, the *De Anima* was edited by Biehl in 1896 (reprinted in THEILER & SEIDL 1995's 1995 translation). Lorem ipsum dolor sit amet, consectetur adipisicing 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. 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.

You can set link-fields to false to avoid undesired linking when citing specific fields.

Later, the `[@DA]{.title}`  
`([@DA]{.title-short})`  
 was edited by  
`[@DABiehl1896]{.editor}`  
 in  
`[@DABiehl1896]{.issued}`  
 (reprinted in  
`[@DATheiler]{.translator}'s`  
`[@DATheiler]{.issued}`  
 translation).

| Markdown Source                        | Output               |
|--|----------------------|
| <code>[@AristOp]{.author}</code>       | Aristotelis          |
| <code>[@AristOp]{.editor}</code>       | Bekker               |
| <code>[@AristOp]{.issued}</code>       | 1834                 |
| <code>[@DA]{.title}</code>             | <i>De Anima</i>      |
| <code>[@DABiehl1896 ]{.editor}</code>  | Biehl                |
| <code>[@DABiehl1896]{.issued}</code>   | 1896                 |
| <code>[@DATheiler]{.translator}</code> | THEILER & SEIDL 1995 |
| <code>[@DATheiler]{.issued}</code>     | 1995                 |

Table 8.3: Simple example of how we are using styles to create the correct markup

#### 4. ADDED the prefix `[]{#scriv\<$linkID>}` to some **Section Layouts**.

This allows us to create links to text sections that do not have a Header element.

Belive it or not, Scrivener can be an interesting place to keep parts of your code. We can use the document bookmarks to leave behind an array of possibilities in case we need to revise something. We can easily copy and paste code stored on Quarto's Github repository to compare using Scrivener's superior text matching tool! (My favorite comparison tool is placing the text in different documents and using “matching text” in the Bookmark tab of the right-side inspector in Scrivener.)

We can also create interesting possibilities to customize and further control the conversion process, by including in our project the default Pandoc Latex Templates. Customize any line of the whole code. Or not,

## 8 Changes

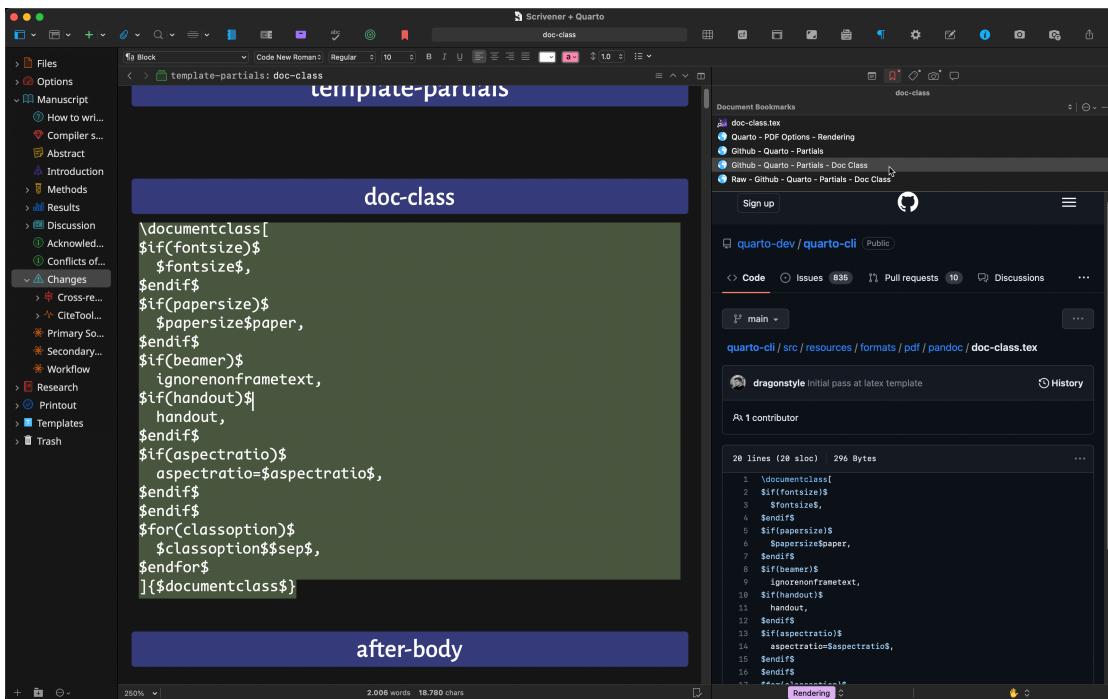


Figure 8.3: Revising code in Scrivener can be just as pleasant

maybe just leave it there and take a look every once in a while at what is going on at the Quarto repository. The template will work either way.

:::{#%autoref% .callout-important } If you are having problems with performance, then you should try to delete the custom icons we are using. I recommend deleting all to see if that makes a difference or not on how Scrivener is behaving. :::

### 💡 Tip

Right click on any Binder item. Change Icon > Manage Custom Icons...

Bootstrap Icons - <https://icons.getbootstrap.com> - These are available in Quarto documents using the **Shortcode Font Awesome** style as in {{< fa regular bell >}} . There is also **Shortcode Env**, **Shortcode Meta**, **Shortcode Var**. Writing in Scrivener (<https://github.com/iandol/scrivomatic#writing-in-scrivener>) is a must read. The Plain Person's Guide to Plain Text Social Science - <https://plain-text.co/index.html#introduction> Quarto Reference - <https://quarto.org/docs/reference/> The easiest way to publish to Github Pages: Render to docs

Example of Quarto Book - [https://github.com/jjallaire/hopr/blob/master/\\_quarto.yml](https://github.com/jjallaire/hopr/blob/master/_quarto.yml)

The variables stored here will be accessible via the **Style Shortcode Var**.

Please contact us at [info@example.com](mailto:info@example.com).

/Users/bcdav/Dropbox/Application Support/pandoc/quarto/ScrivQ/export-mmd

## 8 Changes

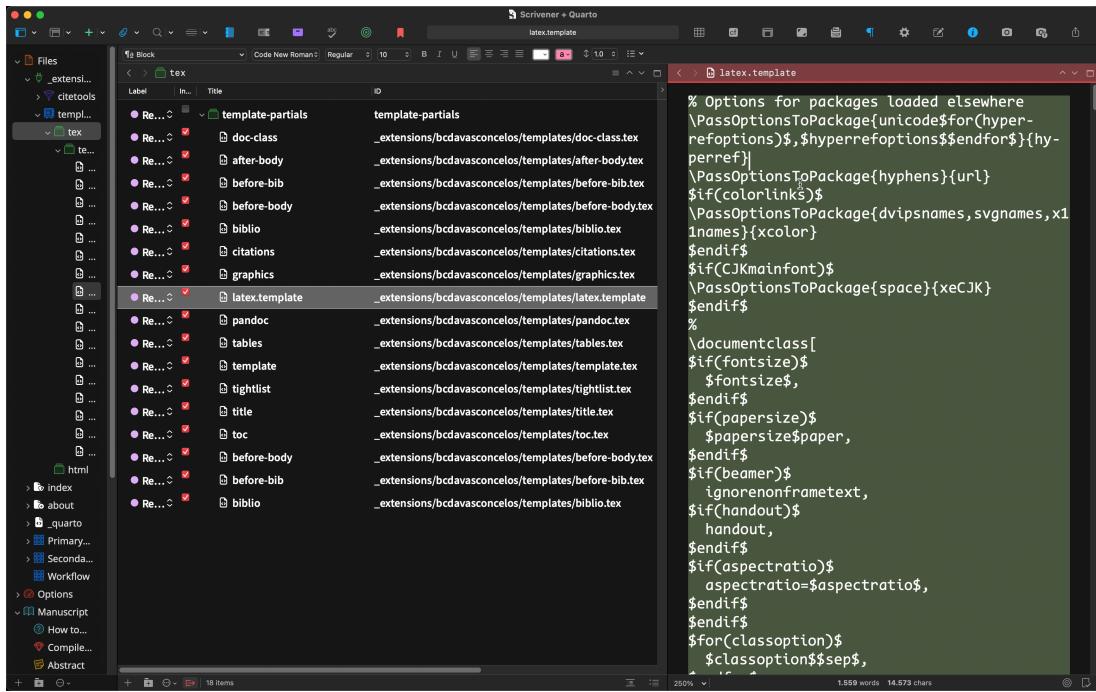


Figure 8.4: Students finishing their MDs or PhDs will certainly appreciate the possibility of adding your own LaTeX customizations, which can also be done by including the code within certain fields, such as before-body.

/Users/bcdav/Dropbox/Application Support/pandoc/quarto/ScrivQ/export-mmd

We are using Python /Users/bcdav/.pyenv/versions/3.11-dev/bin/python /Users/bcdav/.pyenv/versions/3.11-dev/bin/python, ?env:QUARTO\_R, ?env:PY\_PYTHON, or ?env:RETICULATE\_PYTHON.

Quarto with GH Pages - <https://tarleb.com/posts/quarto-with-gh-pages/>

## 9 Primary Sources

ARISTOTELIS. *Aristotelis Opera*. Ed.: I. Bekker. Berlin: Reimer, 1834.

[↔]

ARISTOTELIS. 'De Anima'. In: BEKKER, I. (Ed.). *Aristotelis Opera*. Berlin: Reimer, 1834. [↔]

## **10 Secondary Sources**

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ARISTOTELIS. *De Anima*. Eds.: W. Theiler & H. Seidl. Hamburg: Felix Meiner, 1995. [↔, 23, 23]

## 11 Workflow

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