life's work

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Contents

Chapter 1

preamble

```
library(tidyverse)
library(ggmosaic)
# library(patchwork)
library(dontpanic)
library(lubridate)
```

What if one practices mathematical science like music?

My goal is to spend four hours a day on *work with intent*[1].

For a sanity, efficiency, and inspiration, I intend to balance my time between three categories:

- research, Φ;
- skills, θ; and
- busywork, ψ.

1.1 signifiers

todo: create a signifiers sheet

```
measures %>%
  pluck("data", "signifiers") %>%
  select(-LaTeX) %>%
  knitr::kable()
```

[1]This term is adopted from a piano teacher that I studied under, that I subsequently adapted into my own teaching. She encouraged me to *practice with intent*; that is, play what you intend to play. I found this to be particularly useful for discouraging my students, and myself, from the age-old pitfall of playing a piece of music until you make a mistake and stopping and playing that section over until you get it right. It's better to play *through* the piece, which empBowers you to adapt to mistakes you will inevitably play and, most importantly, not lose time. Oddly, it appeared to be a universal misconception, myself included, that without careful consideration, the attempt to *get the notes right* inevitably means the **rhythm is wrong**, and thus you get nothing right after all. Best, therefore, to play through the piece. I use my bullet journal to help me focus on work with intent; I've found the simplicity of only timing work when I've written down what I intend to do has been extraordinarily powerful in helping me complete daunting tasks.

signifier	meaning	placement
quaver	today	4
*	priority	5
i, ii, ...	project	4
~	anxiety	5
NA	task	1
phi	research	2
theta	skills	2
psi	busywork	2
plus	project	3
magnifying glass	look into	3

Chapter 2

analysis

```
mdat <- wrangle_measures()
```

```
## Joining, by = "category"
```

```
## Warning: Unknown levels in `f`: v
```

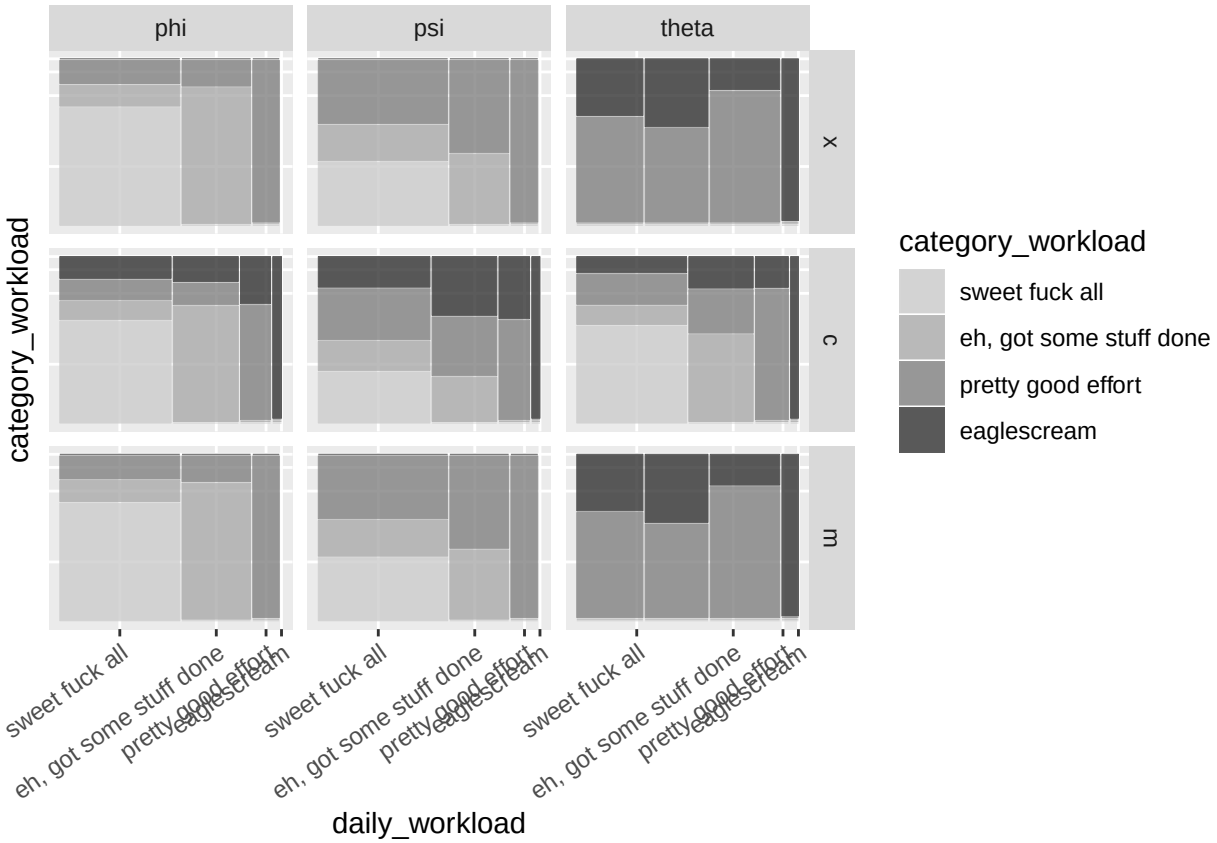
```
## Joining, by = c("category", "category_workload")
```

```
## Warning: Column `category` joining factor and character vector, coercing
## into character vector
```

```
## Warning: Unknown levels in `f`: nothing
```

```
## Warning: Unknown levels in `f`: nothing
```

```
mdat %>%
dplyr::group_by(category_workload, daily_workload, period, category) %>%
    dplyr::count() %>%
    ggplot2::ggplot()+
    ggmosaic::geom_mosaic(
      aes(x = product(daily_workload),
          fill = category_workload,
          weight = n)) +
    scale_fill_grey(start = 0.8, end = 0.2) +
ggplot2::theme(axis.text.y = element_blank(),
      axis.ticks.y = element_blank(),
      axis.text.x = element_text(angle = 35, hjust = 1))+
  facet_grid(period ~ category)
```


phi
psi
theta
x
c
m
category_workload
sweet fuck all
eh, got some stuff done
pretty good effort
eaglescream
daily_workload
category_workload
sweet fuck all
eh, got some stuff done
pretty good effort
eaglescream

Chapter 3

Introduction

You can label chapter and section titles using `{#label}` after them, e.g., we can reference Chapter 3. If you do not manually label them, there will be automatic labels anyway, e.g., Chapter 5.

Figures and tables with captions will be placed in `figure` and `table` environments, respectively.

```
par(mar = c(4, 4, .1, .1))
plot(pressure, type = 'b', pch = 19)
```

Reference a figure by its code chunk label with the `fig:` prefix, e.g., see Figure 3.1. Similarly, you can reference tables generated from `knitr::kable()`, e.g., see Table 3.1.

```
knitr::kable(
  head(iris, 20), caption = 'Here is a nice table!',
  booktabs = TRUE
)
```

You can write citations, too. For example, we are using the **bookdown** package (Xie, 2019) in this sample book, which was built on top of R Markdown and **knitr** (Xie, 2015).

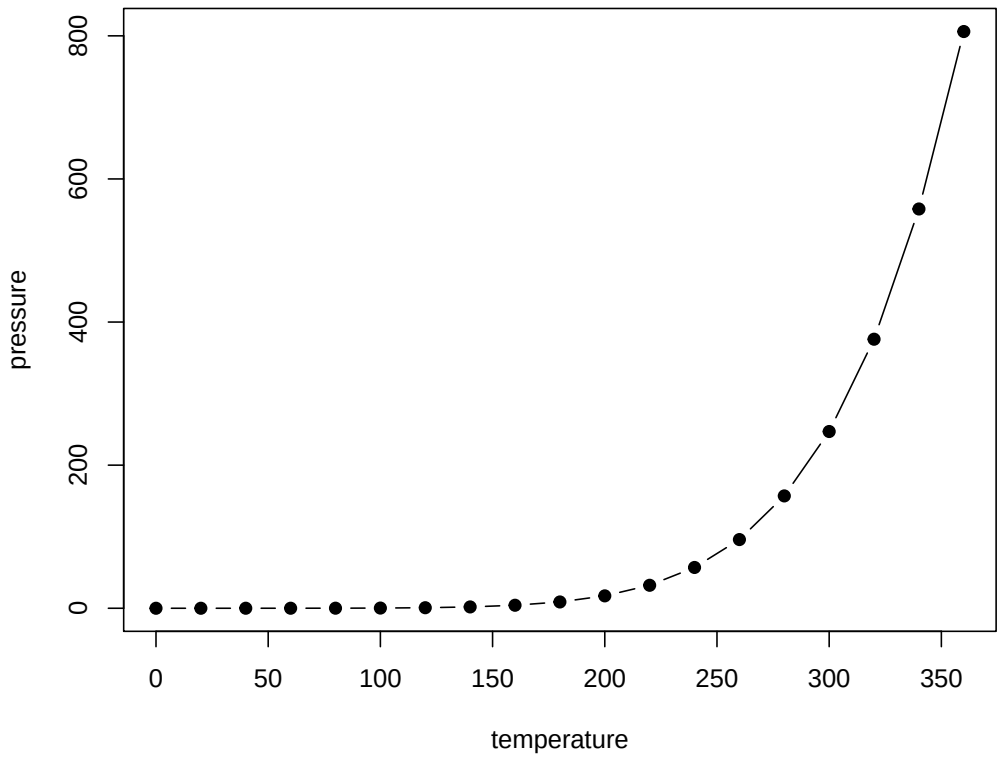


Figure 3.1: Here is a nice figure!

Table 3.1: Here is a nice table!

Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
5.1	3.5	1.4	0.2	setosa
4.9	3.0	1.4	0.2	setosa
4.7	3.2	1.3	0.2	setosa
4.6	3.1	1.5	0.2	setosa
5.0	3.6	1.4	0.2	setosa
5.4	3.9	1.7	0.4	setosa
4.6	3.4	1.4	0.3	setosa
5.0	3.4	1.5	0.2	setosa
4.4	2.9	1.4	0.2	setosa
4.9	3.1	1.5	0.1	setosa
5.4	3.7	1.5	0.2	setosa
4.8	3.4	1.6	0.2	setosa
4.8	3.0	1.4	0.1	setosa
4.3	3.0	1.1	0.1	setosa
5.8	4.0	1.2	0.2	setosa
5.7	4.4	1.5	0.4	setosa
5.4	3.9	1.3	0.4	setosa
5.1	3.5	1.4	0.3	setosa
5.7	3.8	1.7	0.3	setosa
5.1	3.8	1.5	0.3	setosa

Chapter 4

Literature

Here is a review of existing methods.

Chapter 5

Methods

We describe our methods in this chapter.

Chapter 6

Applications

Some *significant* applications are demonstrated in this chapter.

6.1 Example one

6.2 Example two

Chapter 7

Final Words

We have finished a nice book.

Bibliography

Xie, Y. (2015). *Dynamic Documents with R and knitr*. Chapman and Hall/CRC, Boca Raton, Florida, 2nd edition. ISBN 978-1498716963.

Xie, Y. (2019). *bookdown: Authoring Books and Technical Documents with R Markdown*. R package version 0.9.2.