#### Organic Seed Systems

Ву

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#### DISSERTATION

Submitted in partial satisfaction of the requirements for the degree of

#### DOCTOR OF PHILOSOPHY

in

#### **ECOLOGY**

in the

#### OFFICE OF GRADUATE STUDIES

of the

## UNIVERSITY OF CALIFORNIA DAVIS

Approved:	
(Mark Lubell), Chair	
(Tyler Scott)	
(Neil McRoberts)	

 $\begin{array}{c} \text{Committee in Charge} \\ 2023 \end{array}$ 

#### Organic Seed Systems

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## Acknowledgements

"My acknowledgments"

Liza Wood September 2023 ECOLOGY

#### Abstract

"Overall abstract?"

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# Introduction

Short tying it all together

## Chapter 1

# Adoption of organic seed

```
# List of packages required for this analysis

pkg <- c("dplyr", "ggplot2", "knitr", "bookdown", "devtools")

library(dplyr)

library(ggplot2)

library(kableExtra)</pre>
```

#### RESULTS

#### Introduction

## Background

### Empirical approach

### Results

Table 1.1: Cars

dist	speed
2	4
10	4
4	7
22	7
16	8
10	9

The last two options make the table a little easier-to-read.

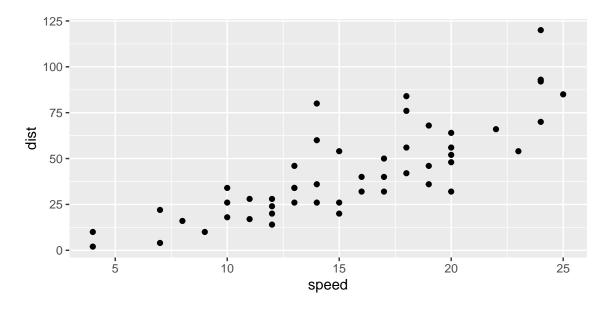


Figure 1.1: Cars

We can further look into the properties of the largest value here for American Airlines Inc. To do so, we can isolate the row corresponding to the arrival delay of 1539 minutes for American in our original flights dataset.

We see that the flight occurred on March 3rd and departed a little after 2 PM on its way to Dallas/Fort Worth. Lastly, we show how we can visualize the arrival delay of all departing flights from Portland on March 3rd against time of departure.

#### Discussion

### Conclusion

# Chapter 2

# Spatial

```
# List of packages required for this analysis

pkg <- c("dplyr", "ggplot2", "knitr", "bookdown", "devtools")

library(dplyr)

library(ggplot2)

library(palmerpenguins)</pre>
```

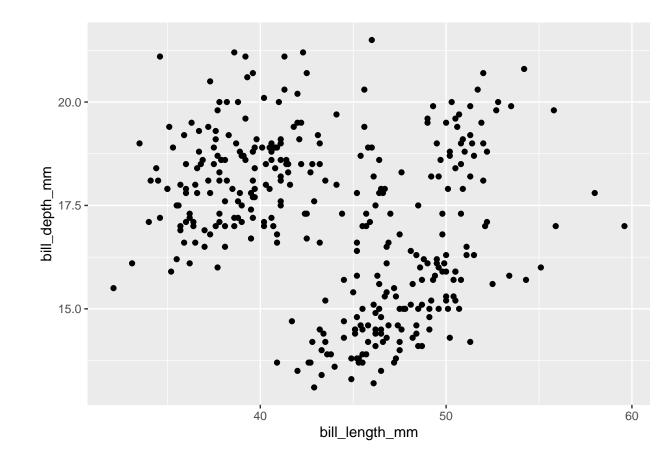


Figure 2.1: Penguins

## Introduction

## Background

## Empirical approach

## Results

Warning: Removed 2 rows containing missing values (`geom\_point()`).

#### DISCUSSION

## Discussion

## Conclusion

# Chapter 3

## Structure

```
# List of packages required for this analysis

pkg <- c("dplyr", "ggplot2", "knitr", "bookdown", "devtools")

library(dplyr)

library(ggplot2)

library(kableExtra)</pre>
```

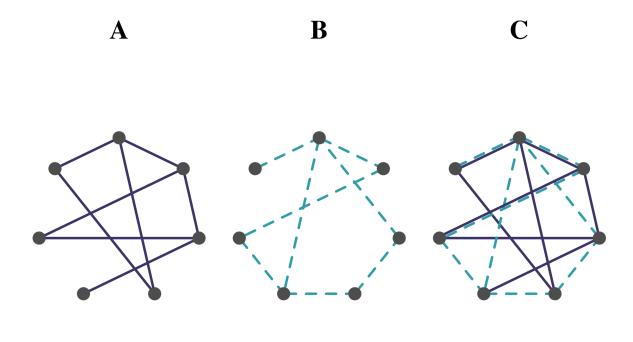


Figure 3.1: motifs

### Introduction

## Background

## Empirical approach

### Results

knitr::include\_graphics("~/Documents/Davis/R-Projects/osisn\_processes/figures/figure2

## Discussion

## Conclusion

## Conclusion

If we don't want Conclusion to have a chapter number next to it, we can add the {-} attribute.

#### More info

And here's some other random info: the first paragraph after a chapter title or section head *shouldn't be* indented, because indents are to tell the reader that you're starting a new paragraph. Since that's obvious after a chapter or section title, proper typesetting doesn't add an indent there.

# Appendix A

# The First Appendix

This first appendix includes all of the R chunks of code that were hidden throughout the document (using the include = FALSE chunk tag) to help with readibility and/or setup.

In the main Rmd file

In Chapter ??:

Appendix B

The Second Appendix, for Fun

## Colophon

This document is set in EB Garamond, Source Code Pro and Lato. The body text is set at 11pt with lmr.

It was written in R Markdown and ETEX, and rendered into PDF using aggiedown and bookdown.

This document was typeset using the XeTeX typesetting system, and the University of California Thesis class. Under the hood, the elements of the document formatting source code have been taken from the Latex, Knitr, and RMarkdown templates for UC Berkeley's graduate thesis, and Dissertate: a LaTeX dissertation template to support the production and typesetting of a PhD dissertation at Harvard, Princeton, and NYU

The source files for this thesis, along with all the data files, have been organised into an R package, xxx, which is available at https://github.com/xxx/xxx. A hard copy of the thesis can be found in the University of XXX library.

This version of the thesis was generated on 2023-08-18 15:14:07.050859. The repository is currently at this commit:

The computational environment that was used to generate this version is as follows:

Session info ------setting value

version R version 4.3.0 (2023-04-21)

os macOS Ventura 13.4

system x86\_64, darwin20

ui X11

language (EN)

dplyr

fansi

ellipsis

evaluate

collate en\_US.UTF-8

ctype en\_US.UTF-8

tz Europe/London

date 2023-08-18

pandoc 3.1.1 @ /Applications/RStudio.app/Contents/Resources/app/quarto/bin/tools/

•	- Packages		
	package	version date (UTC) lib source	
	aggiedown	1.0 2023-08-16 [1] Github (ryanpeek/aggiedown@ae99300)	ı
	bookdown	0.35 2023-08-09 [1] CRAN (R 4.3.0)	
	cachem	1.0.8 2023-05-01 [1] CRAN (R 4.3.0)	
	callr	3.7.3 2022-11-02 [1] CRAN (R 4.3.0)	
	cli	3.6.1 2023-03-23 [1] CRAN (R 4.3.0)	
	colorspace	2.1-0 2023-01-23 [1] CRAN (R 4.3.0)	
	crayon	1.5.2 2022-09-29 [1] CRAN (R 4.3.0)	
	devtools	2.4.5 2022-10-11 [1] CRAN (R 4.3.0)	
	digest	0.6.33 2023-07-07 [1] CRAN (R 4.3.0)	

2023-01-22 [1] CRAN (R 4.3.0)

\* 1.1.2 2023-04-20 [1] CRAN (R 4.3.0)

0.21 2023-05-05 [1] CRAN (R 4.3.0)

1.0.4

0.3.2 2021-04-29 [1] CRAN (R 4.3.0)

#### $APPENDIX\ B.\ \ THE\ SECOND\ APPENDIX,\ FOR\ FUN$

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fastmap		1.1.1	2023-02-24	[1]	CRAN	(R 4.3.0)
fs		1.6.3	2023-07-20	[1]	CRAN	(R 4.3.0)
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ggplot2	*	3.4.3	2023-08-14	[1]	CRAN	(R 4.3.0)
glue		1.6.2	2022-02-24	[1]	CRAN	(R 4.3.0)
gtable		0.3.3	2023-03-21	[1]	CRAN	(R 4.3.0)
highr		0.10	2022-12-22	[1]	CRAN	(R 4.3.0)
htmltools		0.5.6	2023-08-10	[1]	CRAN	(R 4.3.0)
htmlwidgets		1.6.2	2023-03-17	[1]	CRAN	(R 4.3.0)
httpuv		1.6.11	2023-05-11	[1]	CRAN	(R 4.3.0)
httr		1.4.7	2023-08-15	[1]	CRAN	(R 4.3.0)
kableExtra	*	1.3.4	2021-02-20	[1]	CRAN	(R 4.3.0)
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magrittr		2.0.3	2022-03-30	[1]	CRAN	(R 4.3.0)
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mime		0.12	2021-09-28	[1]	CRAN	(R 4.3.0)
miniUI		0.1.1.1	2018-05-18	[1]	CRAN	(R 4.3.0)
munsell		0.5.0	2018-06-12	[1]	CRAN	(R 4.3.0)
palmerpenguins	*	0.1.1	2022-08-15	[1]	CRAN	(R 4.3.0)
pillar		1.9.0	2023-03-22	[1]	CRAN	(R 4.3.0)
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			1	c		

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R6	2.5.1	2021-08-19	[1]	CRAN	(R 4.3.0)
Rcpp	1.0.11	2023-07-06	[1]	CRAN	(R 4.3.0)
remotes	2.4.2.1	2023-07-18	[1]	CRAN	(R 4.3.0)
rlang	1.1.1	2023-04-28	[1]	CRAN	(R 4.3.0)
rmarkdown	2.24	2023-08-14	[1]	CRAN	(R 4.3.0)
rstudioapi	0.15.0	2023-07-07	[1]	CRAN	(R 4.3.0)
rvest	1.0.3	2022-08-19	[1]	CRAN	(R 4.3.0)
scales	1.2.1	2022-08-20	[1]	CRAN	(R 4.3.0)
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#### $APPENDIX\ B.\ \ THE\ SECOND\ APPENDIX,\ FOR\ FUN$

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yaml	2.3.7	2023-01-23	[1]	CRAN	(R 4.3.0)

[1] /Library/Frameworks/R.framework/Versions/4.3-x86\_64/Resources/library

\_\_\_\_\_

# References

Placeholder