Colorado Electapalooza

A Thesis
Presented to
The Division of Mathematics and Natural Sciences and History and Social Sciences
Reed College

In Partial Fulfillment
of the Requirements for the Degree
Bachelor of Arts

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(Mathematics)

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Preface

This is an example of a thesis setup to use the reed thesis document class.

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Abstract

The preface pretty much says it all.

Second paragraph of abstract starts here.

Introduction

The democratic system is based on procedures as much as principles. The way that democracies chose to tally the will of the people is always a messy, controversial process. Thus the design and implementation of voting systems is far from being neutral; the decisions made on who votes, and how, when, and where they do so is inherently coupled with the outcome. Underlying those decisions is a nebulous, inconclusively answered question: are elections fair, and how can we make them more so.

The passage of the Help America Vote Act—or HAVA–(Robert Nay, 2002), which mandated states to update and consolidate public voter registration files, and created the US Elections Assistance Commission that makes available county level data, innovated the way we use data based approaches to answer this question. HAVA offered political scientists and statisticians direct access to the voting population's voting patterns, political registration, age, geolocation and much more; information that up to then was only accessible by sampling through surveys. The immense leap here happens because true population data does away with the need for sampling techniques that are often biased and inaccurate. We can now not only get a complete picture of the data, but also link and merge with other sources of information such as US Census data on religion, race, education, or income—work that has been lucrative for firms such as Catalist or Target Smart. By posing Political Scientific questions, and trying to respond with rigorous statistics, both disciplines tackle these data to face joint problems such as quantifying the quality of voter registration files (Ansolabehere & Hersh, 2010), or linking disparate voter records (Ansolabehere & Hersh, 2017).

Chapter 1

The State of the Literature

In this chapter I will go through current

1.1 What is VBM?

1.2 The Calculus of Voting

1.2.1 Why Turnout Matters

1.2.2 Theories of Voting

1.2.3 How they Apply to VBM

1.3 Previous Study Results

1.3.1 General Results

1.3.2 The Gerber Piece

1.4 Why Voter Registration Files?

1.4.1 Inaccuracy of Survey Data

1.4.2 The Importance of VRF

1.5 Common Methods Used and Problems Encountered

1.5.1 Methods

1.5.2 Issues

Chapter 2

Hypothesis, Data, and Methods

2.1 The Data

2.1.1 Source

2.1.2 Structure

2.1.3 Wrangling

2.2 Hypotheses

2.2.1 Description of Hypotheses

2.2.2 Criteria

2.2.3 Expected Results

2.3 Methodology

2.3.1 EDA

2.3.2 Description and Parametrization of Models

2.4 Gerber Replication

Chapter 3

Results

3.1 EDA

3.2 Model Output

3.3 Gerber Expansion Results

Conclusion

If we don't want Conclusion to have a chapter number next to it, we can add the `{.unnumbered}` attribute. This has an unintended consequence of the sections being labeled as 3.6 for example though instead of 4.1. The LaTeX commands immediately following the Conclusion declaration get things back on track.

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:

```
# This chunk ensures that the reedtemplates package is
# installed and loaded. This reedtemplates package includes
# the template files for the thesis and also two functions
# used for labeling and referencing
if(!require(devtools))
  install.packages("devtools", repos = "http://cran.rstudio.com")
if(!require(reedtemplates)){
  library(devtools)
  devtools::install_github("ismayc/reedtemplates")
}
library(reedtemplates)
```

In :

```
# This chunk ensures that the reedtemplates package is
# installed and loaded. This reedtemplates package includes
# the template files for the thesis and also two functions
# used for labeling and referencing
if(!require(devtools))
  install.packages("devtools", repos = "http://cran.rstudio.com")
if(!require(dplyr))
    install.packages("dplyr", repos = "http://cran.rstudio.com")
if(!require(ggplot2))
    install.packages("ggplot2", repos = "http://cran.rstudio.com")
```

```r
if(!require(reedtemplates)){
  library(devtools)
  devtools::install_github("ismayc/reedtemplates")
  }
library(reedtemplates)
flights <- read.csv("data/flights.csv")
```

Appendix B

The Second Appendix, for Fun

References