Automated Visualisation of Experimental Designs



Emi Tanaka^{, iD}

Biological Data Science Institute, Australian National University Research School of Finance, Actuarial Studies and Statistics, Australian National University



Introduction

Welcome to posterdown! This is my attempt to provide a semi-smooth workflow for those who wish to take their R Markdown skills to the conference world. Most features from R Markdown are available in this package such as Markdown section notation, figure captioning, and even citations like this one (Allaire et al. 2023). The rest of this example poster will show how you can insert typical conference poster features into your own document.

Objectives

- 1. Easy to use reproducible poster design.
- 2. Integration with R Markdown.
- 3. Easy transition from posterdown to pagedown report or manuscript documents (Xie et al. 2022).

Methods

This package uses the same workflow approach as the R Markdown you know and love. Basically it goes from RMarkdown > Knitr > Markdown > Pandoc > HTML/CSS > PDF. You can even use the bibliography the same way (Thorne 2019).

Results

Usually you want to have a nice table displaying some important results that you have calculated. In posterdown this is as easy as using the kable table formatting you are probably use to as per typical R Markdown formatting.

You can reference tables like so: Table 1. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aliquam placerat augue at velit tincidunt semper. Donec elementum porta posuere. Nullam interdum, odio at tincidunt feugiat, turpis nisi blandit eros, eu posuere risus felis non quam. Nam eget lorem odio. Duis et aliquet orci. Phasellus nec viverra est.

Table 1: Table caption.

Sepal.Length	Sepal.Width	Petal.Length	Petal.Width
5.1	3.5	1.4	0.2
4.9	3.0	1.4	0.2
4.7	3.2	1.3	0.2
4.6	3.1	1.5	0.2
5.0	3.6	1.4	0.2
5.4	3.9	1.7	0.4
4.6	3.4	1.4	0.3
5.0	3.4	1.5	0.2
4.4	2.9	1.4	0.2
4.9	3.1	1.5	0.1

Or with figures: Figure 1, or Figure 2.

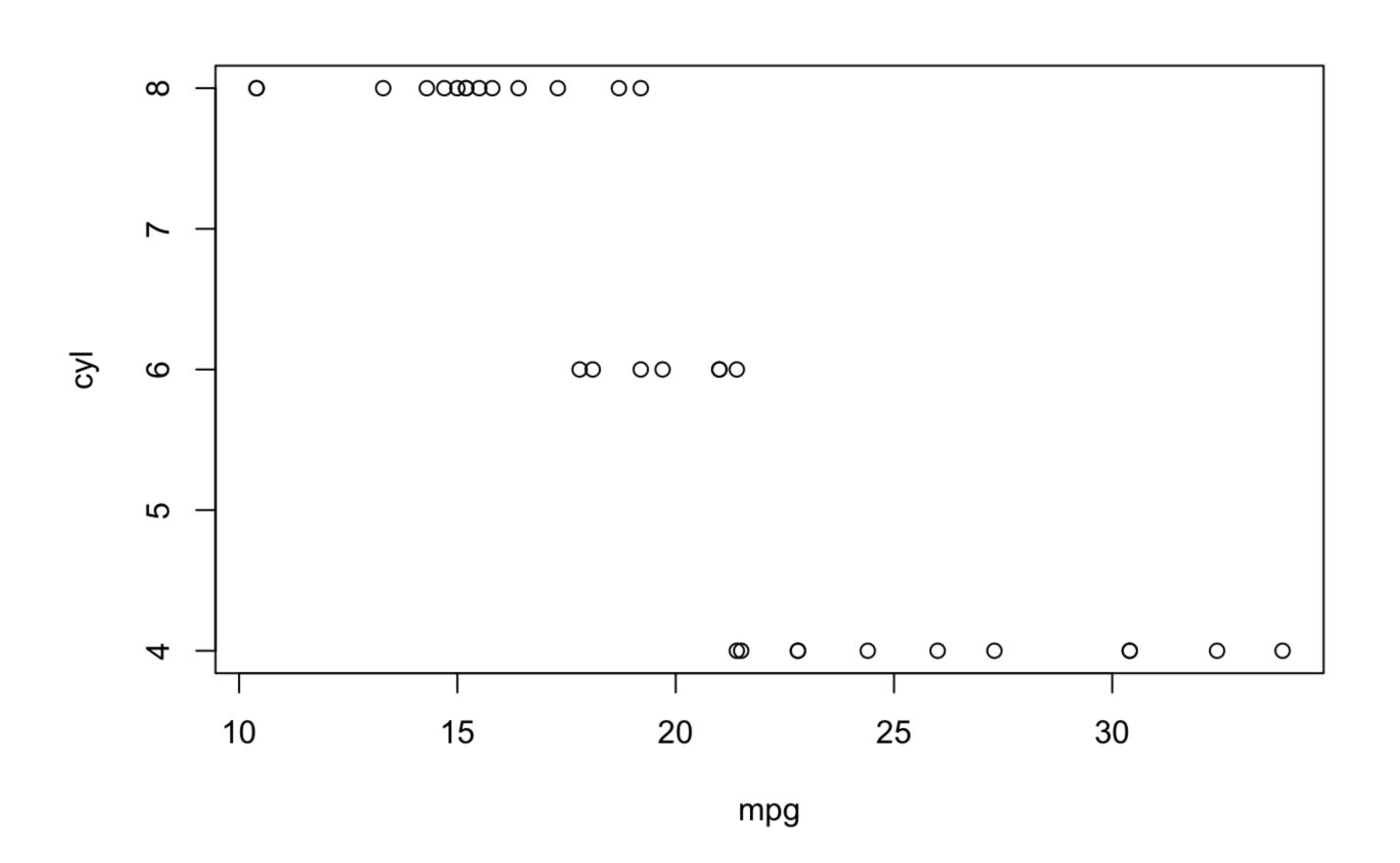


Figure 1: Great figure!

```
data <- iris

plot(x = data$Sepal.Length,
    y = data$Sepal.Width,
    col = data$Species,
    pch = 19,
    xlab = "Sepal Length (cm)",
    ylab = "Sepal Width (cm)")</pre>
```

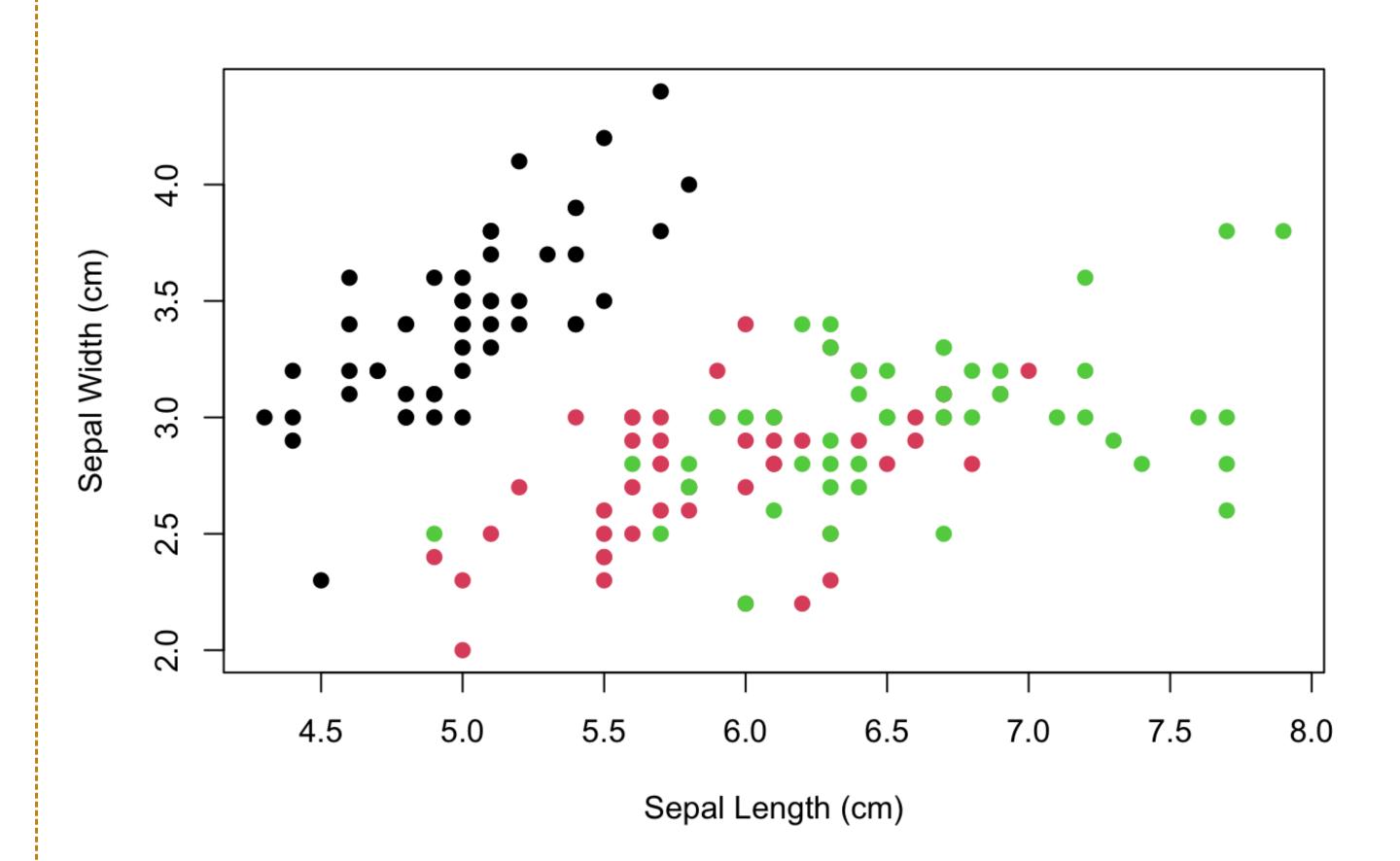


Figure 2: Amazing, right?!

Next Steps

Aliquam sed faucibus risus, quis efficitur erat. Vestibulum semper mauris quis tempus eleifend. Aliquam sagittis dictum ipsum, quis viverra ligula eleifend ut. Curabitur sagittis vitae arcu eget faucibus. In non elementum felis. Duis et aliquam

nunc. Nunc pulvinar sapien nunc, vel pretium nisi efficitur in. Fusce fringilla maximus leo et maximus. Fusce at ligula laoreet, iaculis mi at, auctor odio. Praesent sed elementum justo. Aenean consectetur risus rhoncus tincidunt efficitur. Praesent dictum mauris at diam maximus maximus (Thorne 2019).

Conclusion

Try posterdown out! Hopefully you like it!

References

Allaire, JJ, Yihui Xie, Christophe Dervieux, Jonathan McPherson, Javier Luraschi, Kevin Ushey, Aron Atkins, et al. 2023. *Rmarkdown: Dynamic Documents for r.* https://cran.rhoject.org/package=rmarkdown.

Thorne, Brent. 2019. *Posterdown: Generate PDF Conference Posters Using r Markdown*. https://github.com/brentthorne/posterdown.

Xie, Yihui, Romain Lesur, Brent Thorne, and Xianying Tan. 2022. *Pagedown: Paginate the HTML Output of r Markdown with CSS for Print*. https://github.com/rstudio/pagedown.