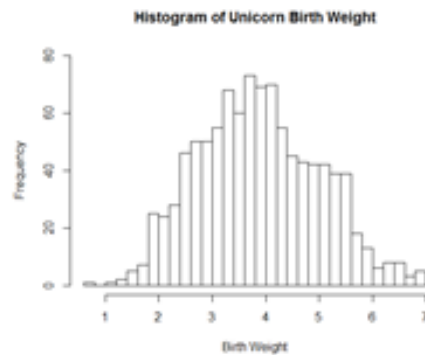


Graphics in R

Sebastian Duchene
University of Sydney

Basic graphics

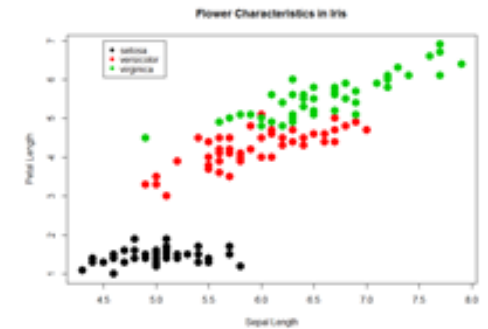
- Base



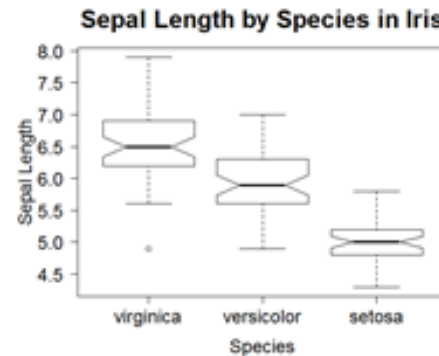
1. Basic Histogram



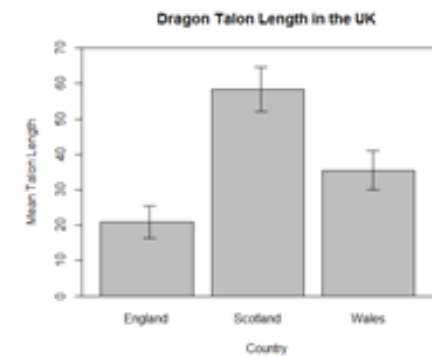
2. Line Graph with Regression



3. Scatterplot with Legend



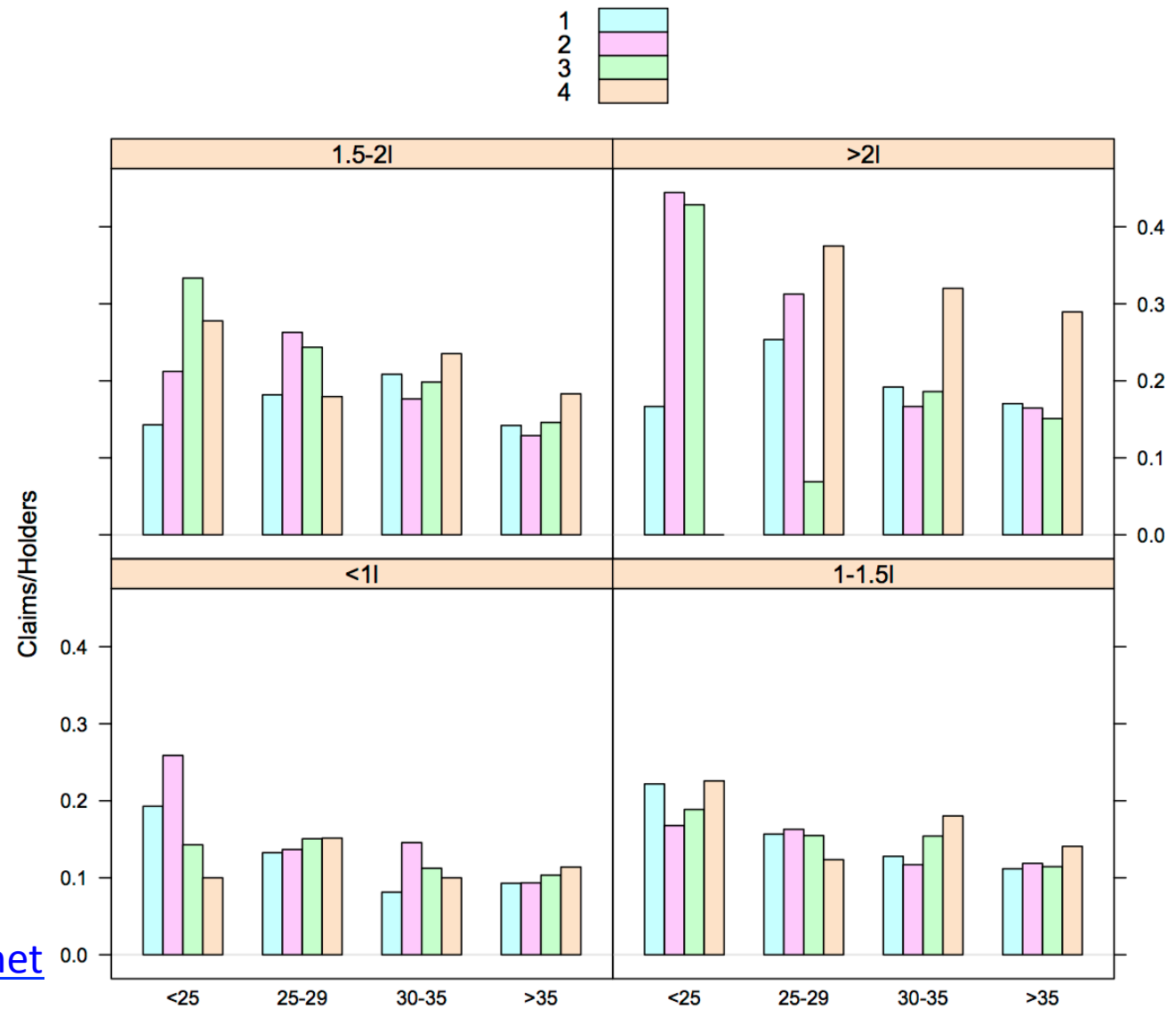
4. Boxplot with reordered/
formatted axes



5. Boxplot with Error Bars

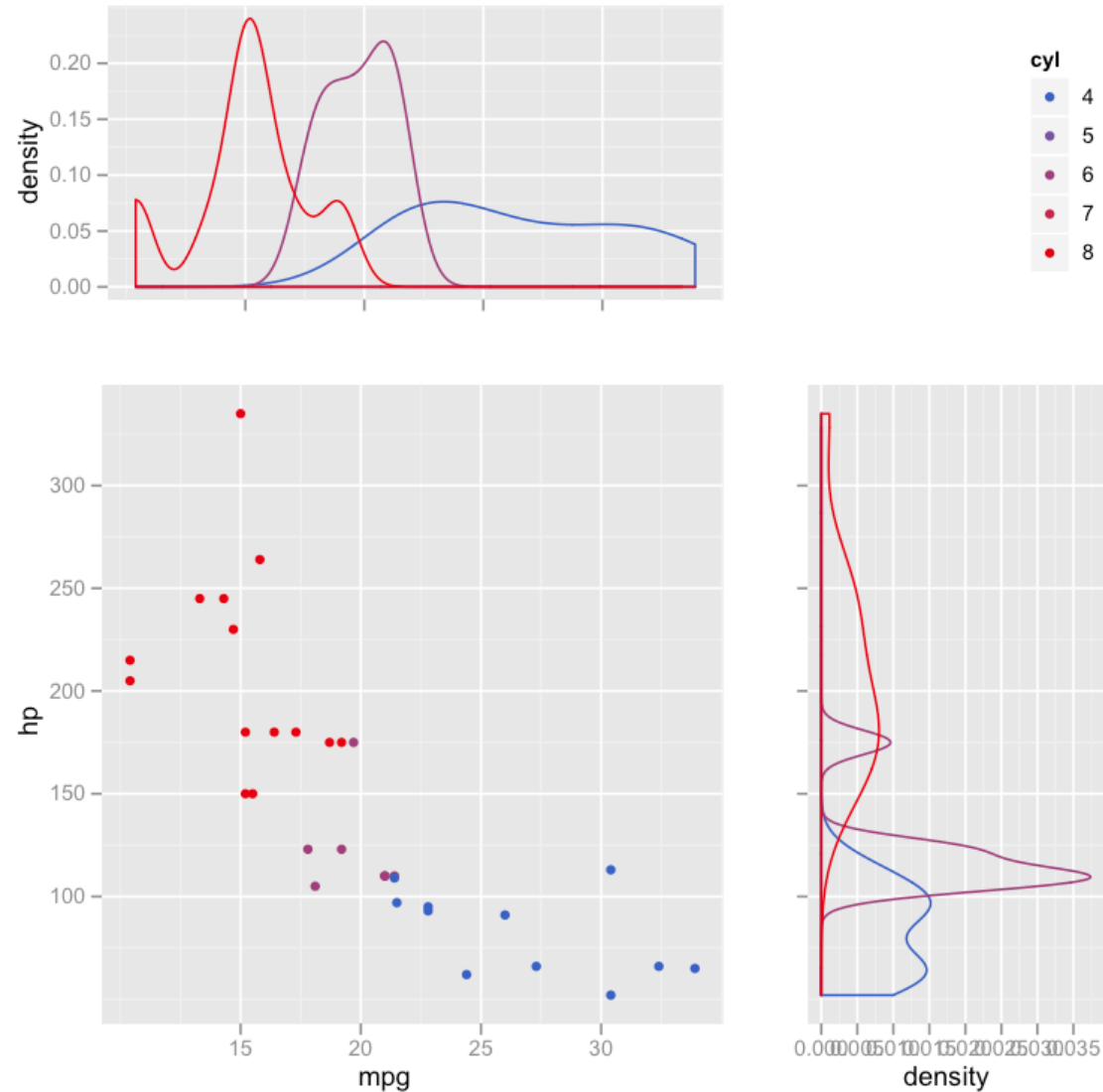
Basic graphics

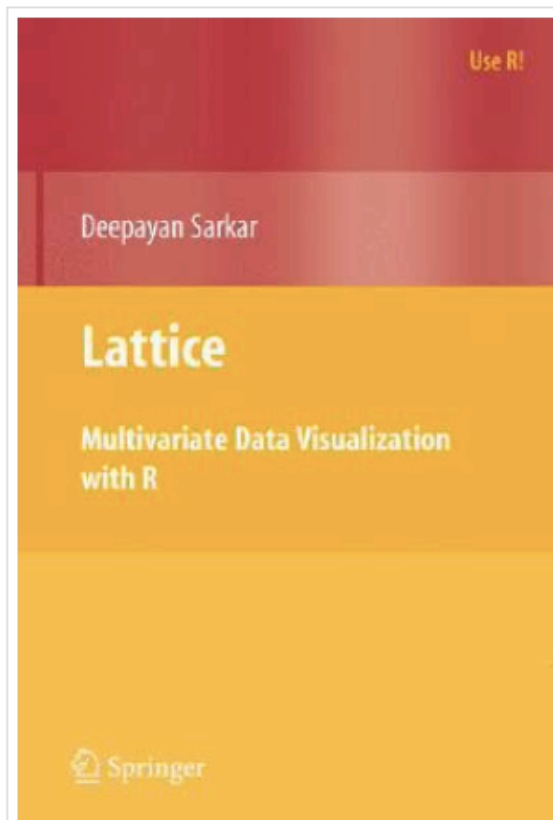
- Lattice



Basic graphics

- ggplot2





Lattice

Multivariate Data Visualization with R

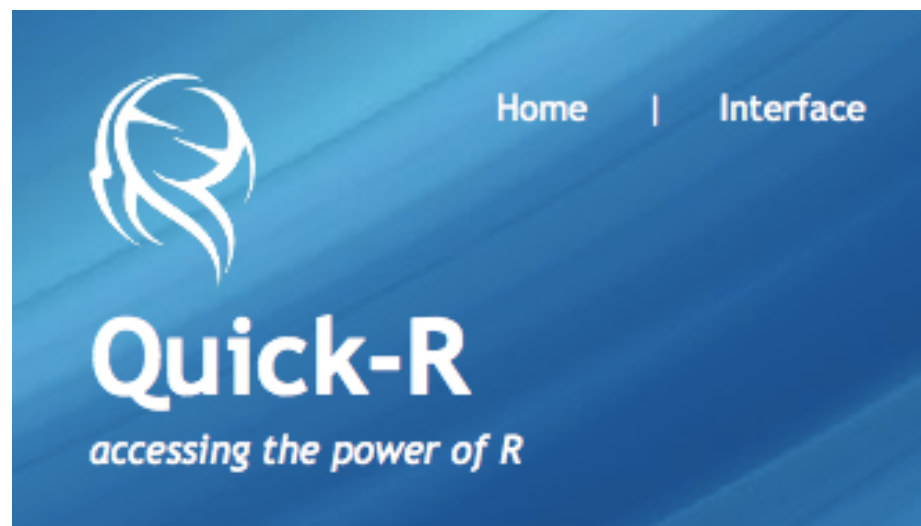
★★★★★ | Be the first to write a review

By: [Deepayan Sarkar](#)

Paperback

Published: 1st March 2008

Ships: 7 to 10 business days



Ggplot2

Elegant Graphics for Data

★★★★★ | Be the first to write a review

By: [Hadley Wickham](#)

Paperback

Published: 1st August 2009

Ships: 7 to 10 business days

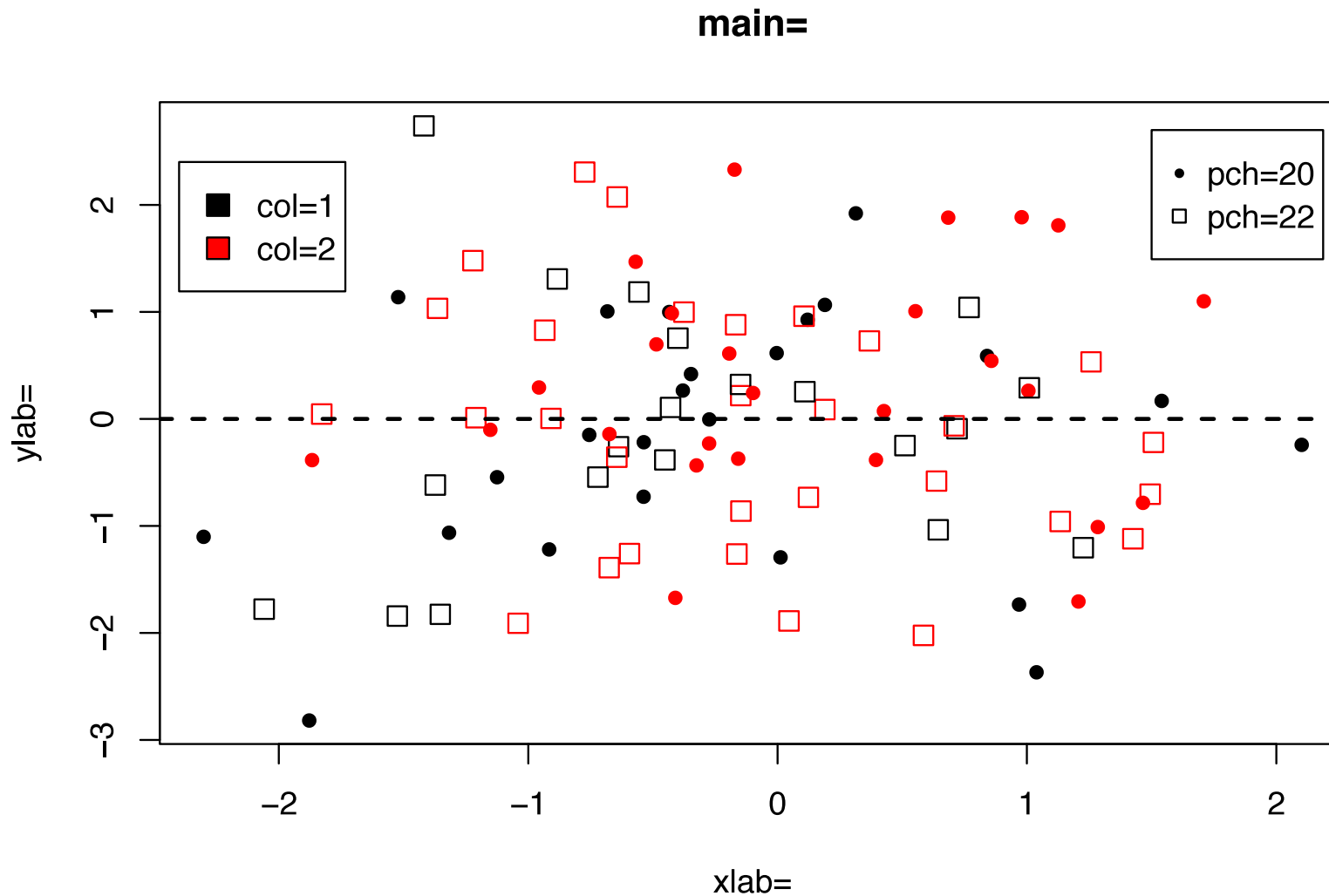


Graphic devices

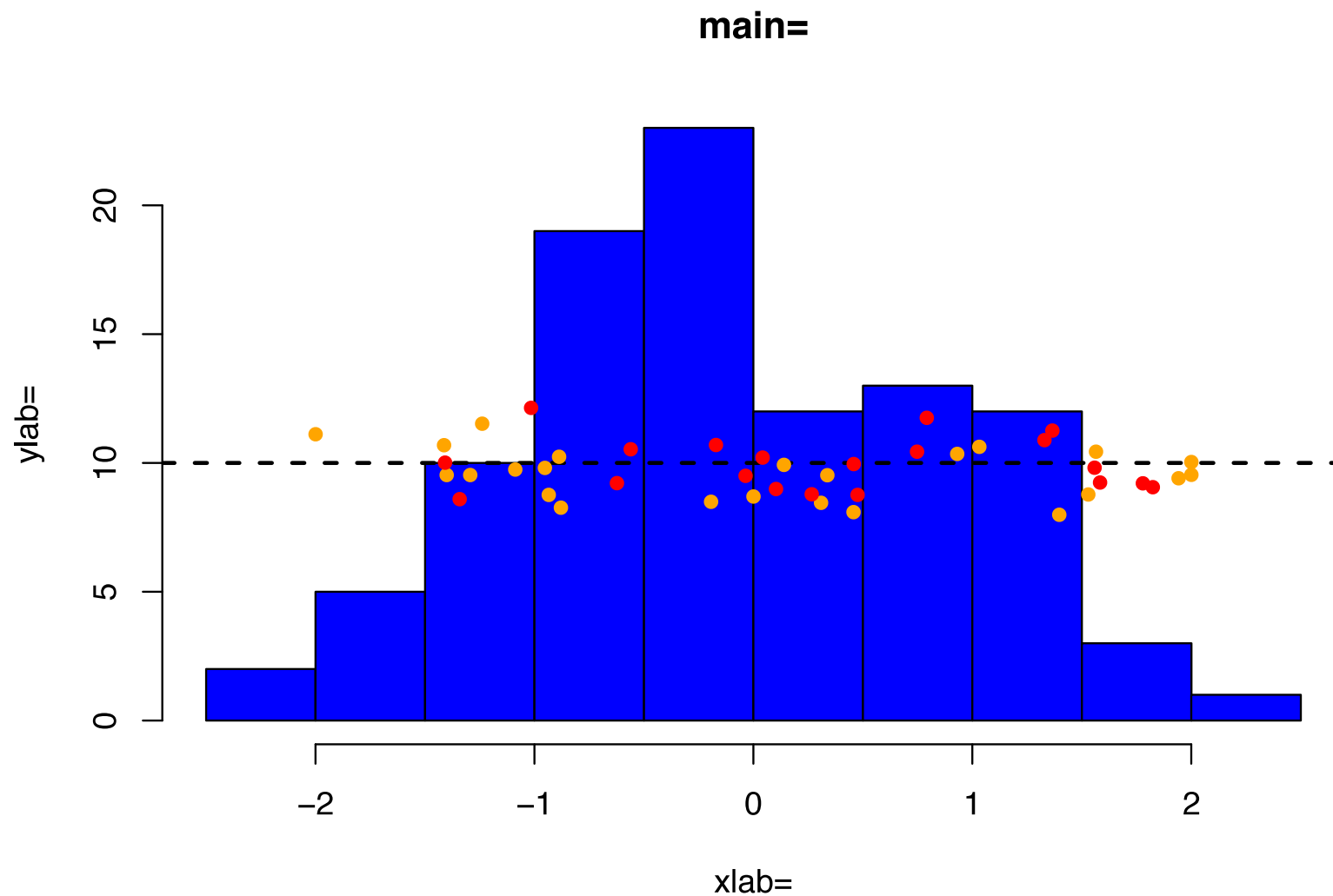
- X11 on Unix machines (separate window)
- Vector images (pdf, svg, eps and postscript)
- Raster images (JPEG, PNG, TIFF, and others)

Custom graphics

Parameters of functions in Base



Additional data with points and lines

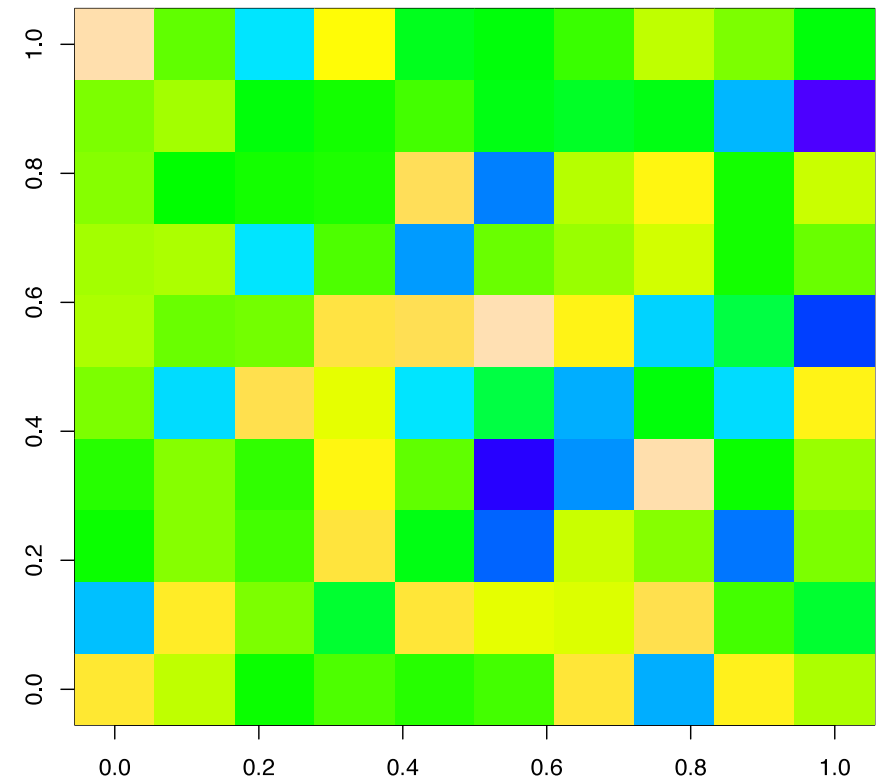
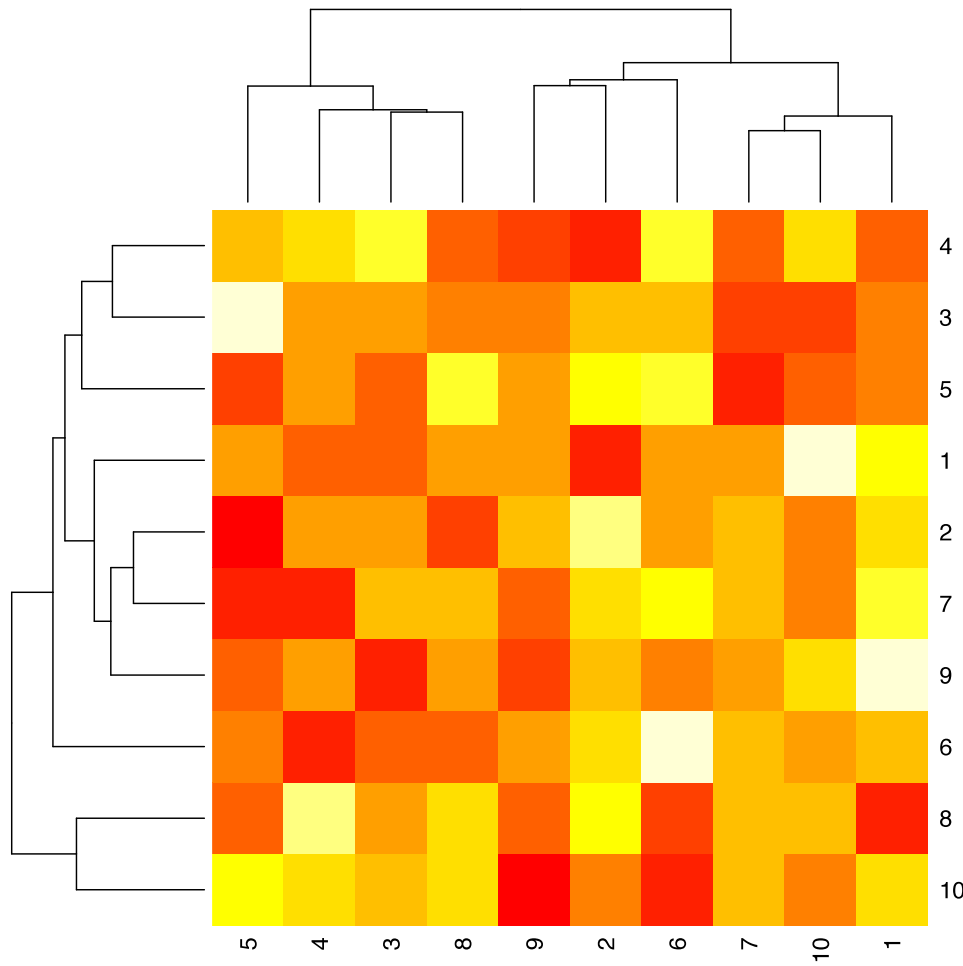


Maps

```
> library(maps)
> library(mapdata)
> chyt <- read.table("Chytridomycosis_short.csv", head = T, sep = ",")
> map(regions = "australia")
> points(chyt$Longitude, chyt$Latitude, pch = 20, col = "red")
```

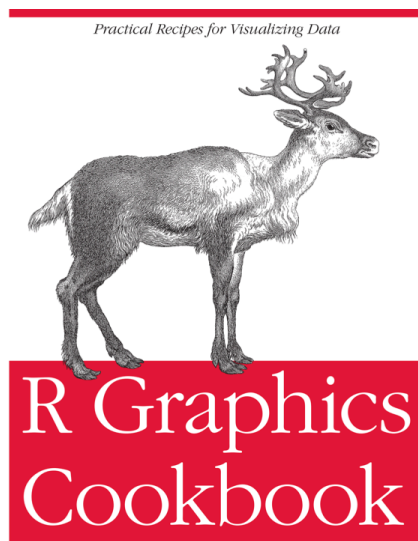


Heat maps and images



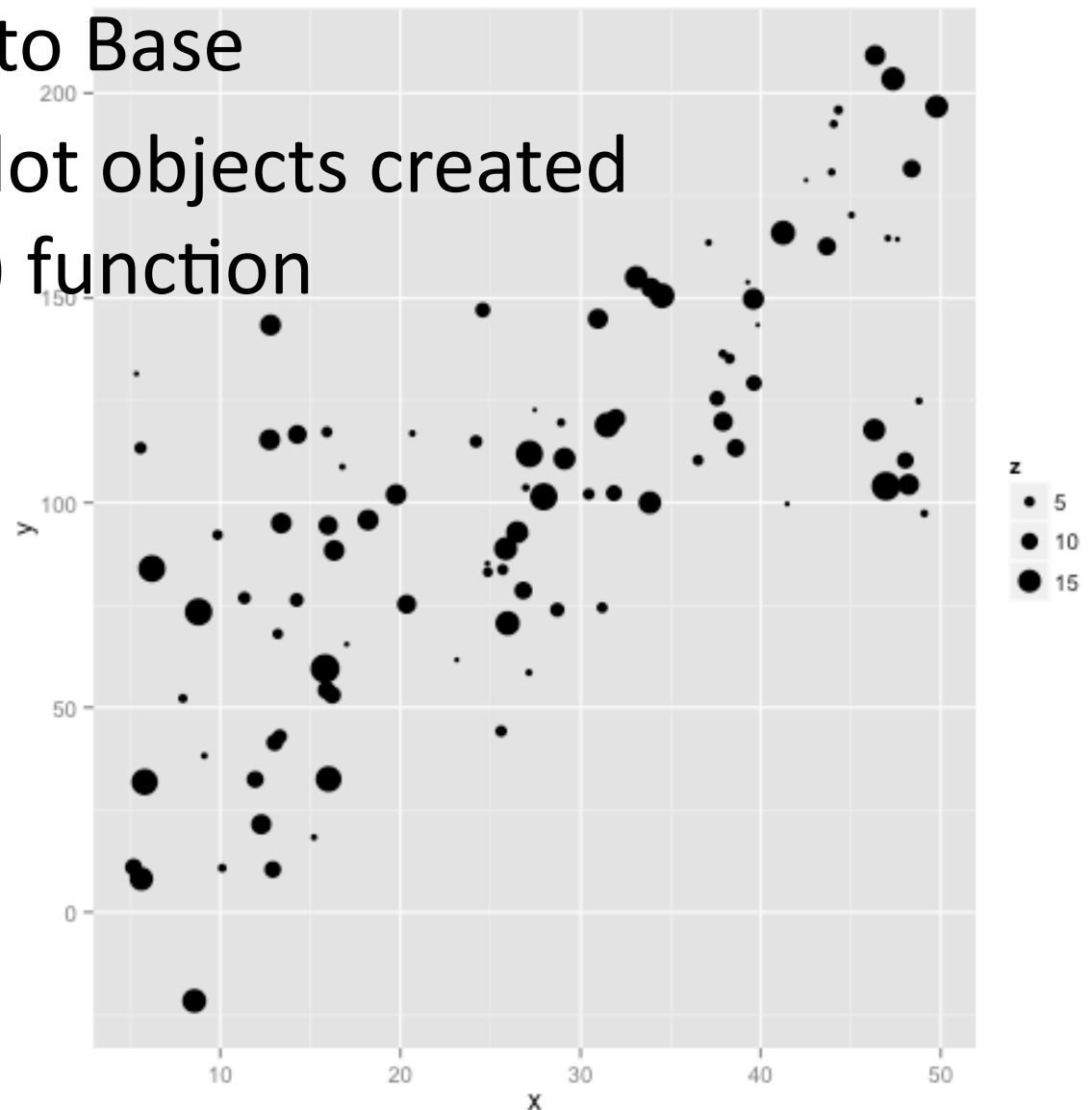
ggplot2

- Different syntax to Base
- Depends on ggplot objects created with the `ggplot()` function



O'REILLY®

Winston Chang



Tutorial 6: Basic graphics and output

- Functions `plot()`, `hist()`, `barplot()` and common arguments.
- Saving graphics by exporting graphical devices
- Copy graphics as shown in current device

We learned...

- We can plot data in R with different functions
 - `plot()` for scatter plots and others
 - `hist()`
 - `boxplot()`
 - `barplot()`
- Plots can be exported in pdf. There are other formats available