An In-Depth Exploration of Advanced Data Visualization Techniques with R

Workshop by Ketura Elie

Grammar of Graphics

GGplot – R package for producing data visualizations

Elements of ggplot

⭐ **Data**

⭐ **Aesthetics**

⭐ **Geometries**

Facets

Statistics

Coordinates

Themes

Grammar of Graphics

GGplot – R package for producing data visualizations

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Bar Graph
Histograms
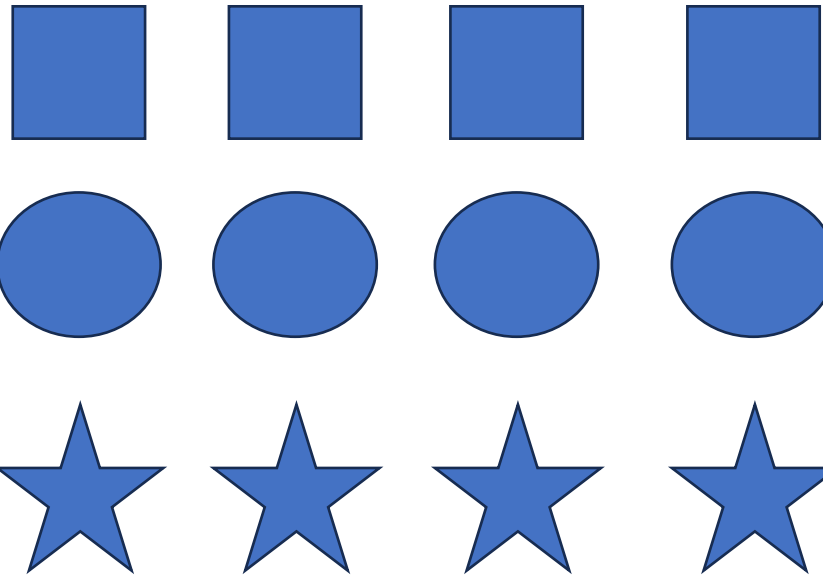**Boxplots**

Scales (color,fill)
Factor
Themes

Factors

a special variable "type"

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a special variable "type"

Shapes

If we wanted to visualize this data, we would need to recognized the 'shapes' variable as a factor

Bar Plots, Histograms, BoxPlots

Bar Plots, Histograms, BoxPlots

Data
the data / data set itself

Aesthetics
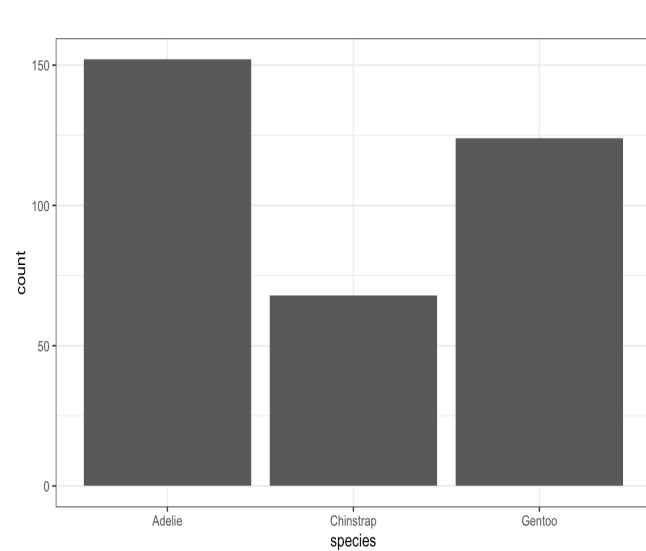"variables" / data mapped onto the aesthetic elements
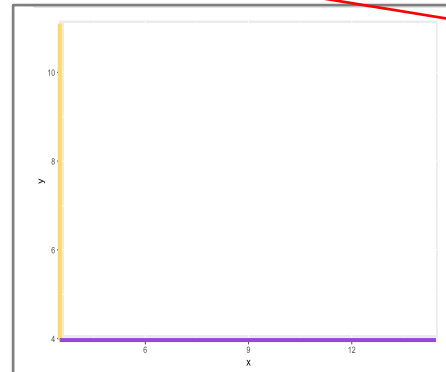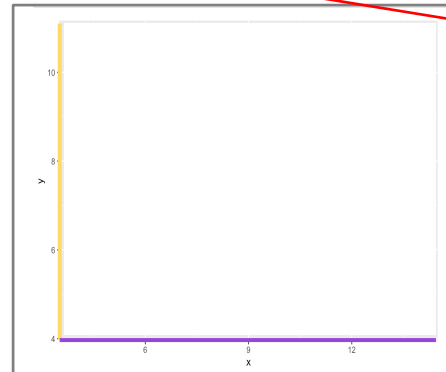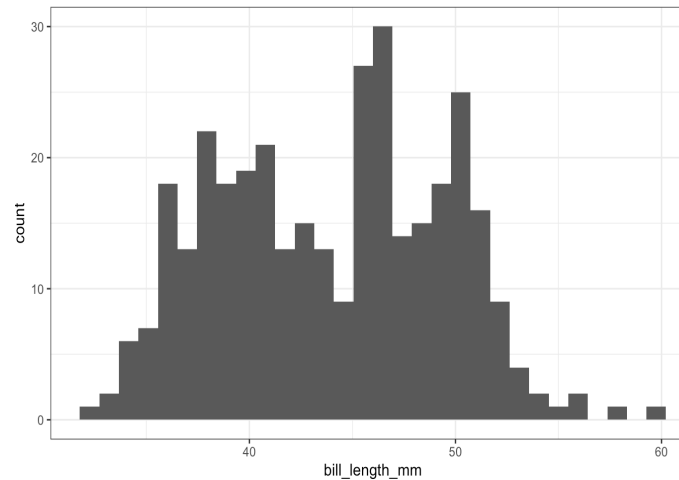
Geometries
determines how data is displayed
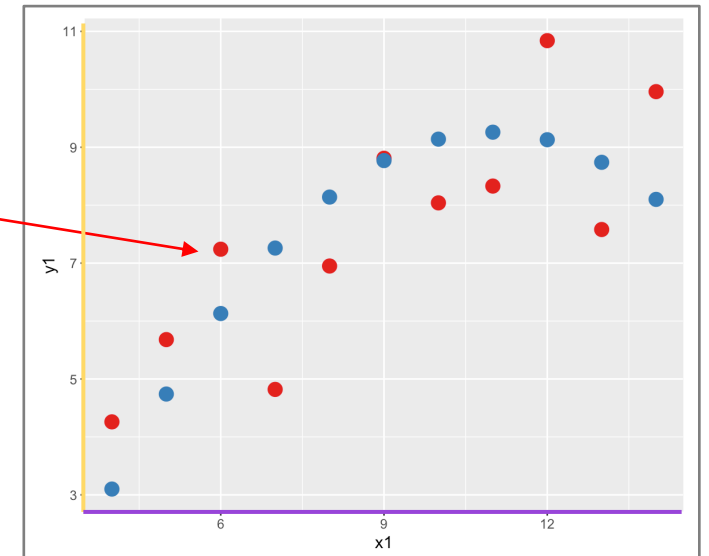
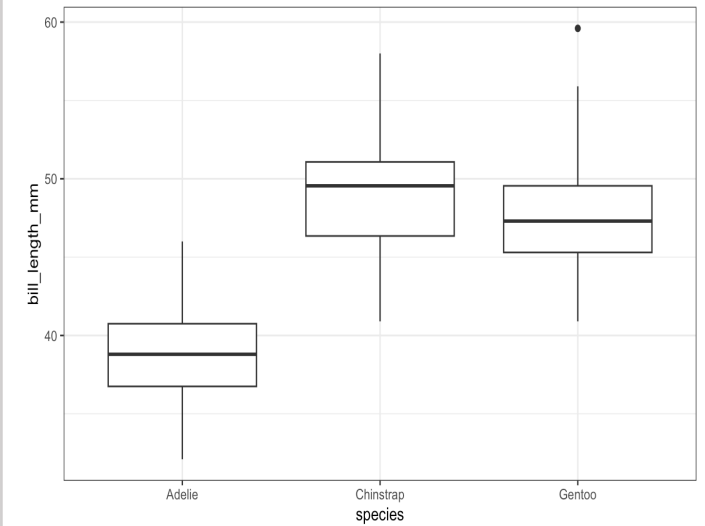# Bar Plots, Histograms, Box Plots

Bar plots
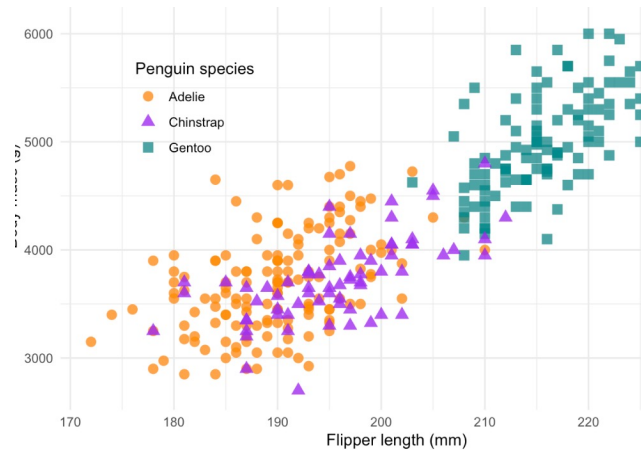**geom_bar()***

Histograms
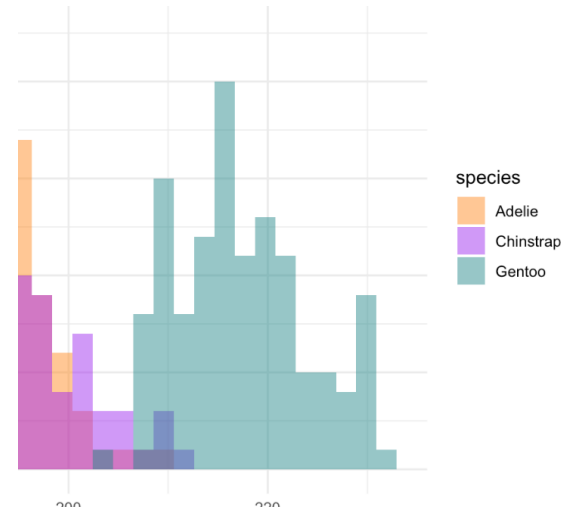**geom_histogram()**

Box plots
geom_boxplot()

Advance Customization

Scales
scale_fill, scale_color
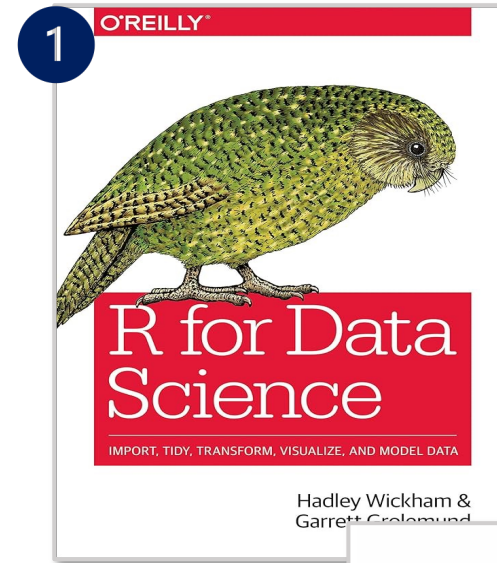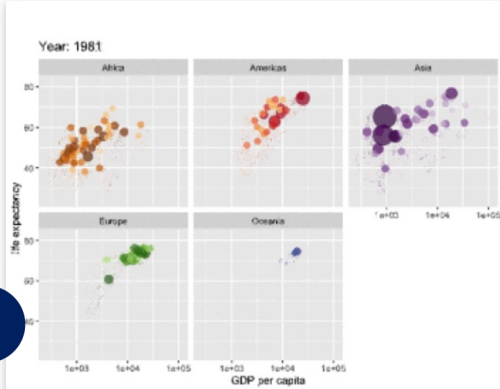

Themes
Legends position

Resources

Resources that might be helpful

1. R for Data Science (Wickham & Grolemund)

2. Data Visualization: A Practical Introduction (Healy) (Package)

3. ggplot extensions gallery (extensions for cool and plots!)

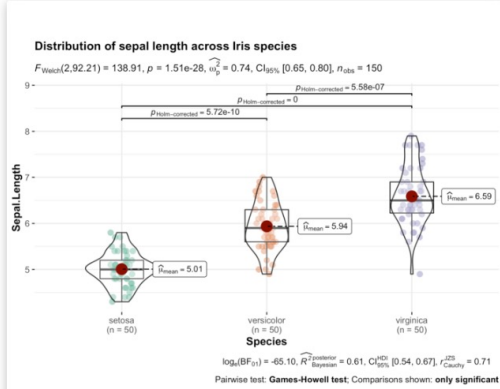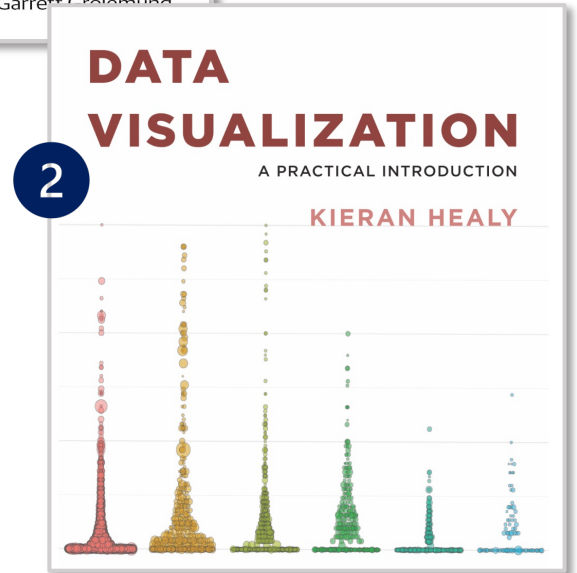note the second link is to the package, *not* the book