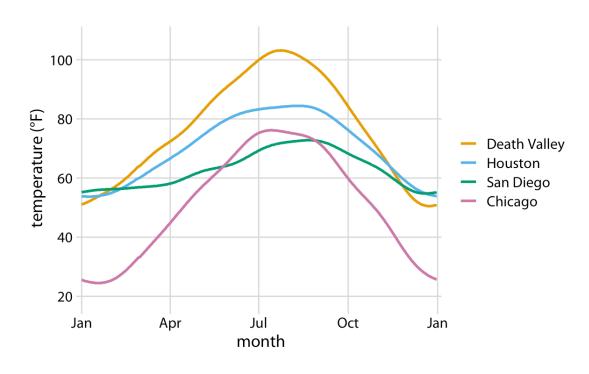
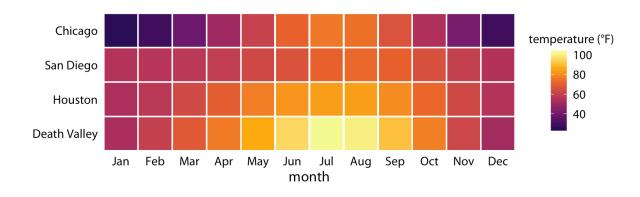


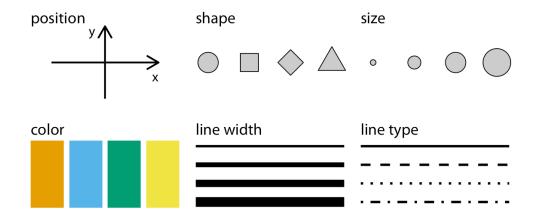
Exploratory Data Analysis

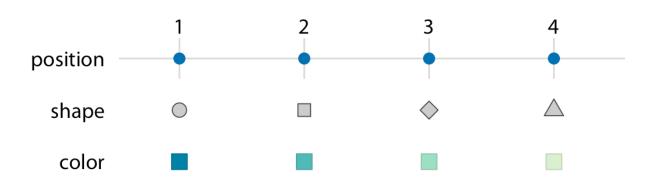
Grammar of Graphics

Prof. Dr. Gero Szepannek Statistics, Business Mathematics & Machine Learning Stralsund University of Applied Sciences



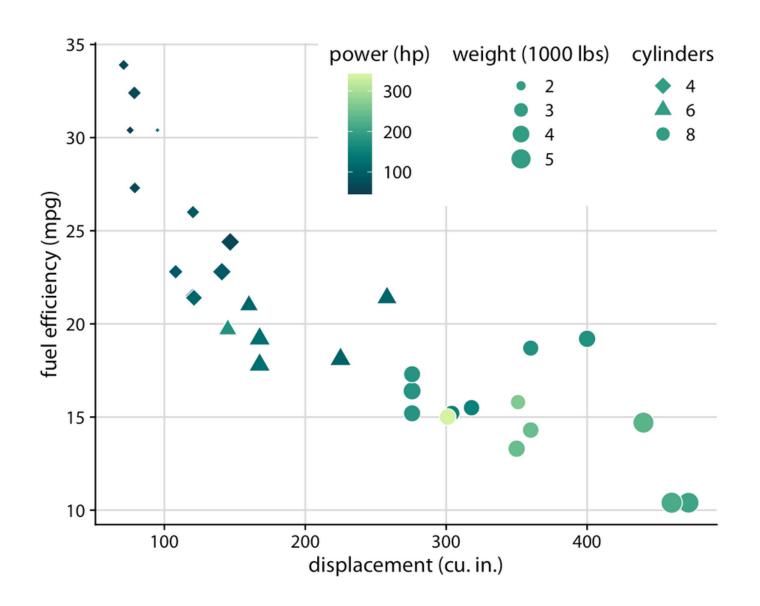


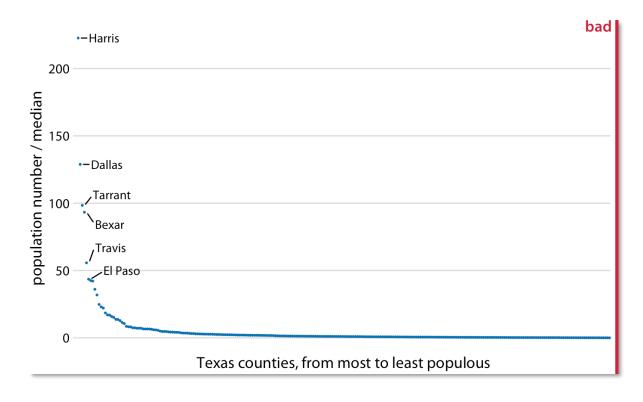


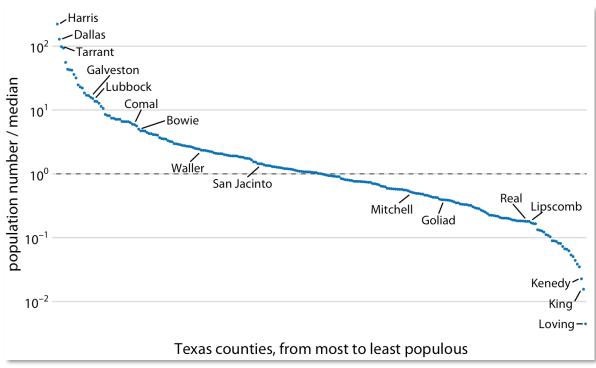


Common aesthetics

Mapping







Amounts Grouped Bars Grouped Bars Stacked Bars Heatmap Histogram **Cumulative Density** Quantile-Quantile Plot **Distributions** Pie Chart **Proportions**

Multiple Pie Charts

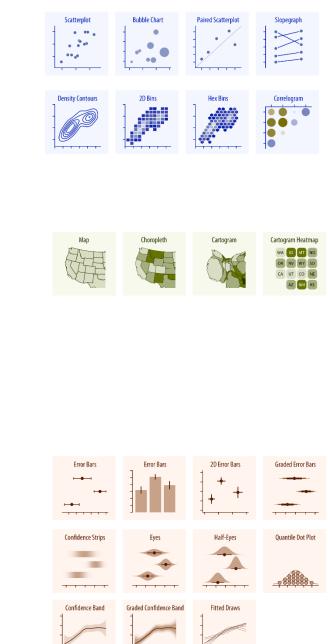
900

Grouped Bars

Treemap



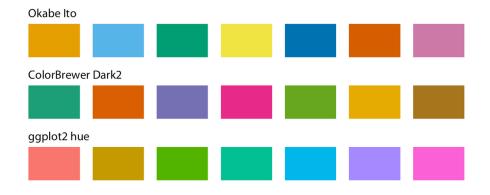
Dependency



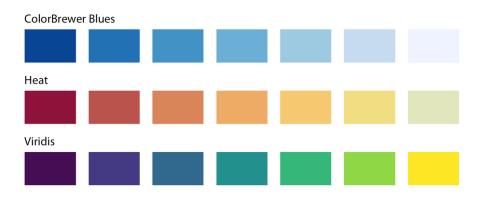
Stacked Bars

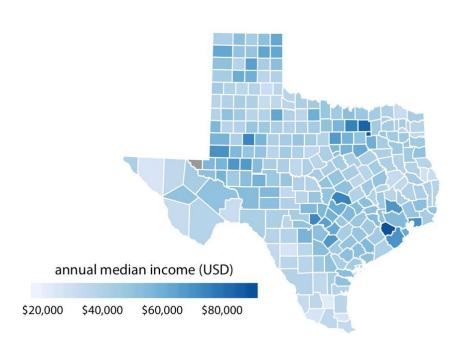
Sina Plots

Qualitative (no order):



Quantitative





Brewer, Cynthia A. 2017. "ColorBrewer 2.0. Color Advice for Cartography." http://www.ColorBrewer.org.

Okabe, M., and K. Ito. 2008. "Color Universal Design (CUD): How to Make Figures and Presentations That Are Friendly to Colorblind People." http://jfly.iam.u-tokyo.ac.jp/color/.

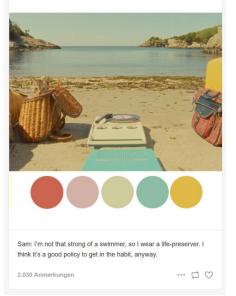
Qualitative (no order):

Viridis



...Wes Anderson Palettes:







K. Ram and H. Wickham. wesanderson: A Wes Anderson Palette Generator, 2018. URL https://CRAN.R-project.org/package=wesanderson. R package version 0.3.6.

How to create BBC style graphics

Make a line chart

Make a multiple line chart

Make a bar chart

Make a stacked bar chart

Make a grouped bar chart

Make a dumbbell chart

Make a histogram

Make changes to the legend

Make changes to the axes

Add annotations

Work with small multiples

Do something else entirely

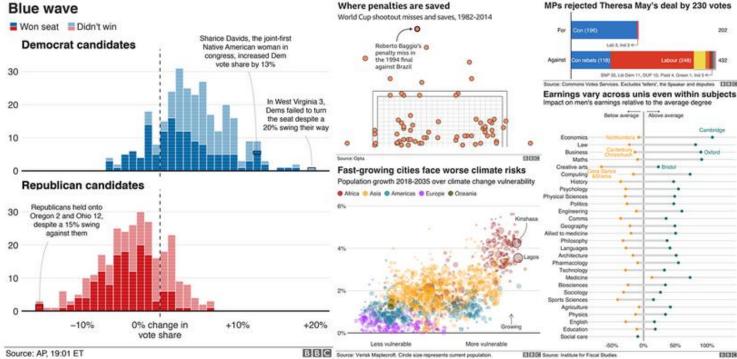
BBC Visual and Data Journalism cookbook for R graphics

Last updated: 2019-01-24

How to create BBC style graphics

At the BBC data team, we have developed an R package and an R cookbook to make the process of creating publication-ready graphics in our in-house style using R's ggplot2 library a more reproducible process, as well as making it easier for people new to R to create graphics.

The cookbook below should hopefully help anyone who wants to make graphics like these:



We'll get to how you can put together the various elements of these graphics, but let's get the admin out of the way first... https://bbc.github.io/rcookbook/