# Resources

### David Osborne

# Books (free online)

- James Long & Paul Teetor (2019) R Cookbook. https://rc2e.com/
- Winston Chang (2018) R Graphics Cookbook. https://r-graphics.org/
- Garrett Grolemund & Hadley Wickham (2016) R for Data Science. https://r4ds.had.co.nz/
  - uses Tidyverse
- Julia Silge and David Robinson (2017) Text Mining With R. https://www.tidytextmining.com/
- Robin Lovelace et al. (2019) Geocomputation with R. https://r.geocompx.org/
- Yihui Xie (2022) RMarkdown: the Definitive Guide. https://bookdown.org/yihui/rmarkdown/

# Books (in print)

- Brunsdon & Comber (2014) An Introduction to R for Spatial Analysis & Mapping. London: SAGE Publications.
- Carlson (2017) Quantitative Methods in Archaeology Using R. Cambridge: Cambridge University Press.

#### **Guides**

- R Studio cheatsheets: https://www.rstudio.com/resources/cheatsheets/
- Finding your way to R: https://education.rstudio.com/learn/
- Bookdown: https://bookdown.org/
- Winston Chang: Cookbook for R. http://www.cookbook-r.com
- Quarto: https://quarto.org/

### Subject-related guides

- Mike Baxter (2015) Notes on Quantitative Archaeology and R. https://www.academia.edu/12545743/Notes\_on\_Quantitative\_Archaeology\_and\_R
- Ben Marwick (2018) Using R and Related Tools for Reproducible Research in Archaeology. http://www.practicereproducibleresearch.org/case-studies/benmarwick.html
  - in Kitzes et al. (eds.) (2018) The Practice of Reproducible Research: Case Studies and Lessons from the Data-Intensive Sciences. http://www.practicereproducibleresearch.org/
- Ismay and Kim (2018) A modern dive into data with R: An introduction to statistical and data sciences via R. https://moderndive.com/index.html
- Chester Ismay (2018) Statistical inference: a Tidy approach. https://ismayc.github.io/talks/ness-infer/slide\_deck.html#1
- CRAN Task Views: https://www.stats.bris.ac.uk/R/ then click on Task Views

### **Examples**

- R graph gallery: https://www.r-graph-gallery.com
- Ben Marwick's @archpaperscode Twitter bot: https://twitter.com/archpaperscode
- Tidy Tuesday 2022 examples gallery: https://github.com/deepdk/TidyTuesday-2022
  - Tom Mock explains the Tidy Tuesday project at https://www.youtube.com/watch?
    v=H8rhQOj7vDY

#### Video

- Simon Jackson's Wrangling Data in the Tidyverse (useR! 2018 workshops & tutorials)
  - Part 1 (1:16:10): https://www.youtube.com/embed/E-Vvg8uzcVM
  - Part 2 (1:11:43): https://www.youtube.com/embed/DwWH1mTerOc

# **Packages**

- Tidyverse https://www.tidyverse.org/
  - ggplot2: https://ggplot2.tidyverse.org
  - Paper: Wickham et al. (2019) https://doi.org/10.21105/joss.01686
- ggcharts simple ggplot2-based visualisation

# **Tools**

- Rstudio IDE widely-used Integrated Development Environment for R
- GitHub for version control
- Github Pages for websites
- ChatGPT just joking =:o

# Teaching materials (for the tutors)

• RStudio Education: https://education.rstudio.com/teach/