

R4Rchaeologists: Advanced visualisation exercises

Exercise C: tables

Tables are often overlooked as a visualisation – but they are one! Tufte (1983), for example, recommends tables as the most effective way to visualise small datasets, and/or when it is useful to compare exact values. As a rule of thumb, if you find yourself making a bar chart with or worse, a pie chart, consider whether the data would be better presented in a table.

gt provides a ggplot-inspired grammar for tables that makes it possible to make sophisticated and publication-ready tables in R.

Your objectives for this exercise are to:

1. Display the `RBPottery` dataset (from `archdata`) in a table
2. Apply appropriate grouping and formatting
3. Add metadata (title, subtitle, caption and footnotes), including highlighting suspicious values (see `?RBPottery`)

Data

- `archdata::RBPottery`

R packages and functions

The following packages will be useful for this exercise:

- `gt`
- `dplyr`

Remember that you can open the documentation for any function with `?function_name()`. Google is also your friend – most packages have websites or GitHub repositories with extended documentation. There are also many tutorials and StackOverflow questions about common problems in R.

Hints

- Like ggplot, gt works best with ‘tidy’ data. You will need to do some tidying of the `RBPottery` dataset first.
- Look at the documentation for the `RBPottery` dataset first, to understand what it is and where it comes from.