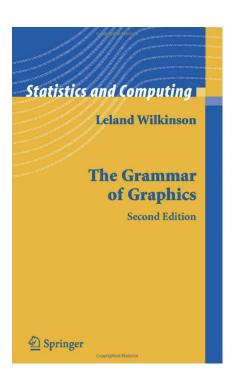
# The grammar of graphics

EC 103-02

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The ggplot2 package is an R package developed by Hadley Wickham, based on the "grammar of graphics."



One of the most appealing aspects of ggplot2 is that is maps (tidy) data to aesthetics.

It works by adding layers to an initial blank "canvas."

Instead of working with pre-made graphics (as in Excel), we are able to build custom plots by adding incremental pieces of information.

The main pieces of information that go into a *ggplot* are:

- 1. Your variables (the aesthetics);
- 2. The selected *geometries* (geom\_);
- 3. Subsequent formatting options (scales, themes, titles, subtitles, etc.)

The ggplot2 package is part of the tidyverse (no need to install anything new).

Let us make sense of these first concepts by working with the gapminder package.