

**This is ungraded additional practice. We recommend that you work on it as study material.**

Complete the following two questions in a Quarto Document.

### Question 1

Use the `gapminder` data set in the `gapminder` library to recreate a version of Hans Rosling's famous data visualization shown in the *A Grammar of Graphics* slides (a single plot instead of a movie; in other words, for just a single year).

- You can see at a glance which years are available by running `count(gapminder, year)` in an R chunk.
- You may use GDP per capita rather than fertility rate.

You will need to take the following steps.

#### Step A

Determine the correct geometry for the plot and make an initial `ggplot` with the two variables on the x and y axis.

#### Step B

Distinguish the continents by either shape or color. Which ever one you do not use, *set* its value to something other than the default. *Hint: use the help\_file for `geom_point()` to find options you can set to!*

#### Step C

Alter the x and y axis labels so that they're more descriptive than just the variable given names in `gapminder`.

#### Step D

Apply a theme of your choosing.

#### Step E

Add an annotation that draws attention to a particular feature of the data (of your choosing).

#### Step F

Title your plot with a claim based on your data.

#### Step G

Apply a theme of your choosing.

### Question 2

Recreate one of the plots that you created for Lab 1.2, but incorporate at least 3 of the 6 elements of Communicating with Graphics to polish your plot into one that tells a particular story.