Enhancing graphics

Exercise 10 — PMAP 8551, Fall 2024

Felipe Melo

April 6, 2025

Table of contents

# Task 1: Reflection

Put your reflection here

# Task 2: Enhanced plot

When you knit this document, you will create and save a basic bar chart of hot dog eating contest winners. You will then open the resulting file in a [vector editing program](https://datavizf24.classes.andrewheiss.com/resource/graphics-editors.html).

Be sure that you save your file **with a different name**. You don’t want to accidentally overwrite all your enhancements and updates when you knit this document. That would be so sad.

library(tidyverse)

── Attaching core tidyverse packages ──────────────────────── tidyverse 2.0.0 ──  
✔ dplyr 1.1.4 ✔ readr 2.1.5  
✔ forcats 1.0.0 ✔ stringr 1.5.1  
✔ ggplot2 3.5.1 ✔ tibble 3.2.1  
✔ lubridate 1.9.3 ✔ tidyr 1.3.1  
✔ purrr 1.0.2   
── Conflicts ────────────────────────────────────────── tidyverse\_conflicts() ──  
✖ dplyr::filter() masks stats::filter()  
✖ dplyr::lag() masks stats::lag()  
ℹ Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors

library(svglite)  
  
hotdogs <- read\_csv("data/hot-dog-contest-winners.csv") |>  
 rename(dogs = `Dogs eaten`, record = `New record`) |>  
 mutate(record = factor(record))

Rows: 31 Columns: 5  
── Column specification ────────────────────────────────────────────────────────  
Delimiter: ","  
chr (2): Winner, Country  
dbl (3): Year, Dogs eaten, New record  
  
ℹ Use `spec()` to retrieve the full column specification for this data.  
ℹ Specify the column types or set `show\_col\_types = FALSE` to quiet this message.

# Change the colors here if you want  
# (or anything else if you want too)  
plot\_hotdogs <- ggplot(hotdogs,   
 aes(x = Year, y = dogs, fill = record)) +   
 geom\_col() +   
 scale\_fill\_manual(values = c("grey80", "#FC7300")) +  
 scale\_x\_continuous(breaks = seq(1980, 2010, 2),   
 expand = c(0, 0)) +  
 scale\_y\_continuous(breaks = seq(0, 70, 10),   
 expand = c(0, 0)) +  
 guides(fill = "none") +  
 labs(y = "Hot dogs and buns", x = NULL) +  
 theme\_minimal() +  
 theme(panel.background = element\_rect(fill = "transparent", colour = NA),  
 plot.background = element\_rect(fill = "transparent", colour = NA),  
 axis.ticks.x = element\_line(linewidth = 0.25),  
 panel.grid.major.x = element\_blank(),  
 panel.grid.major.y = element\_line(linewidth = 0.5, linetype = "dashed"),  
 panel.grid.minor = element\_blank())  
  
# Change the dimensions here if you want  
ggsave(plot\_hotdogs, filename = "hotdogs.pdf", device = cairo\_pdf,  
 width = 7, height = 4, units = "in", bg = "transparent")  
  
ggsave(plot\_hotdogs, filename = "hotdogs.svg",  
 width = 7, height = 4, units = "in", bg = "transparent")