R Markdown Exercises from R4DS: Graphics

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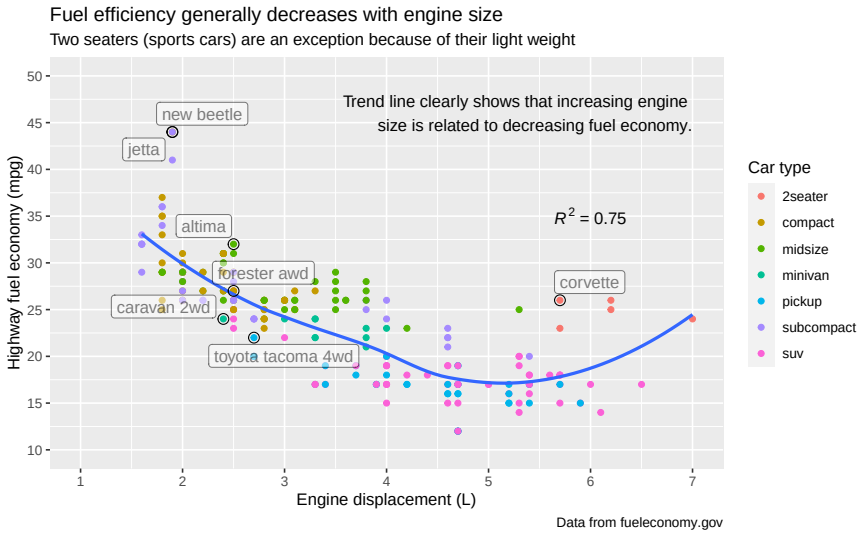
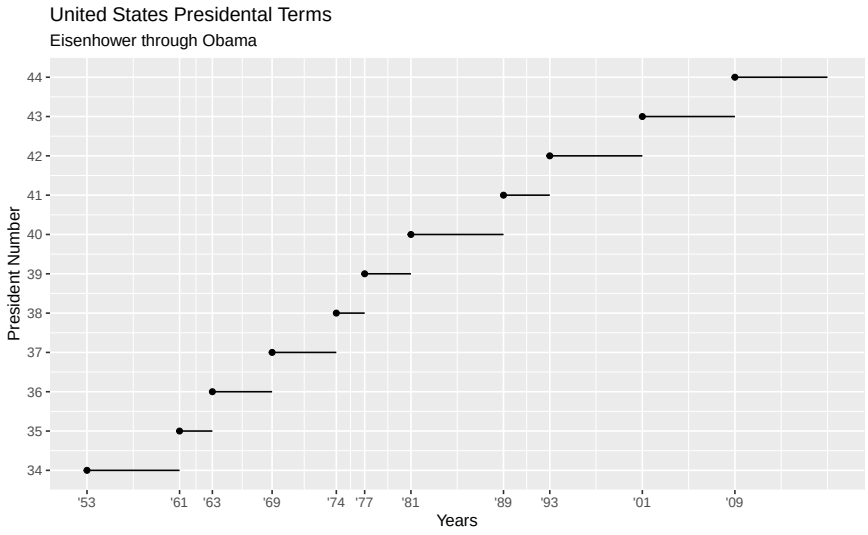
Plot aesthetics

Here we demonstrate methods to improve communication efficacy by using various labeling and annotation options within **ggplot** (including references to options in the **ggplot** extension **ggrepel**).

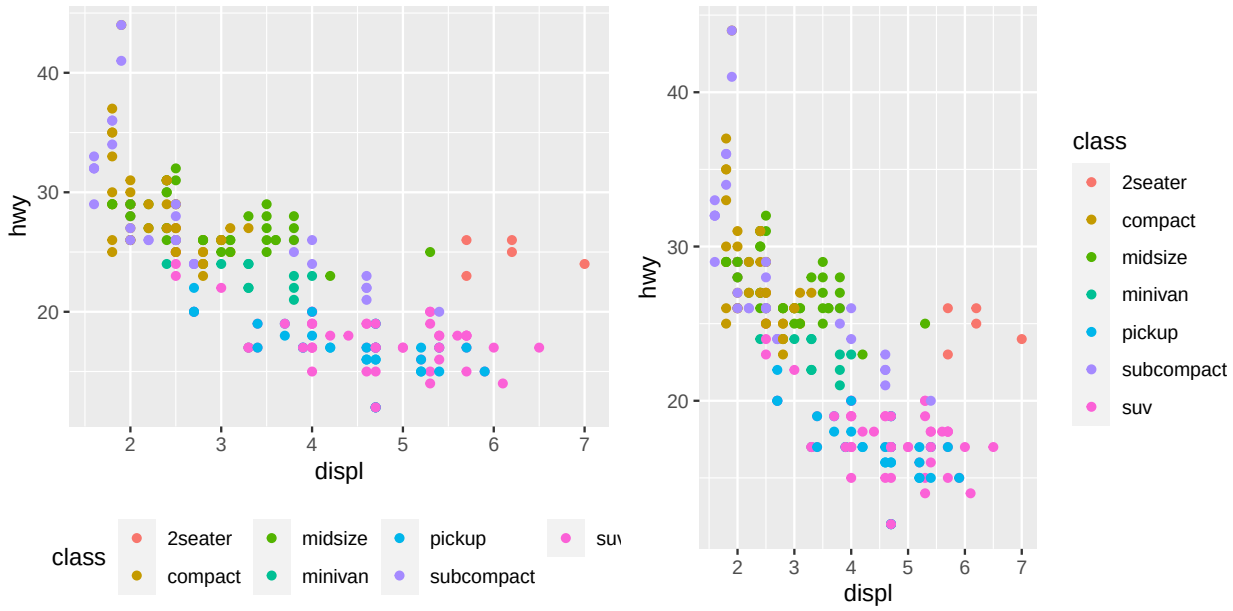


Some variable control over axis labels is demonstrated by `scale_x_date()` with breaks set to specific elements from a tibble - in this case `breaks = presidential$start`.

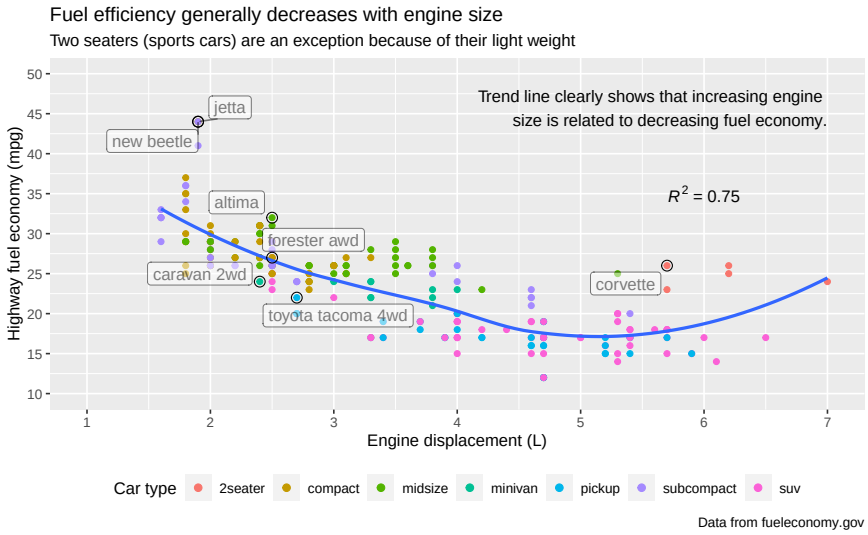


Below demonstrates some control over how legends are displayed. We also control here the layout of the four different plots within the document with setting of various chunk options.

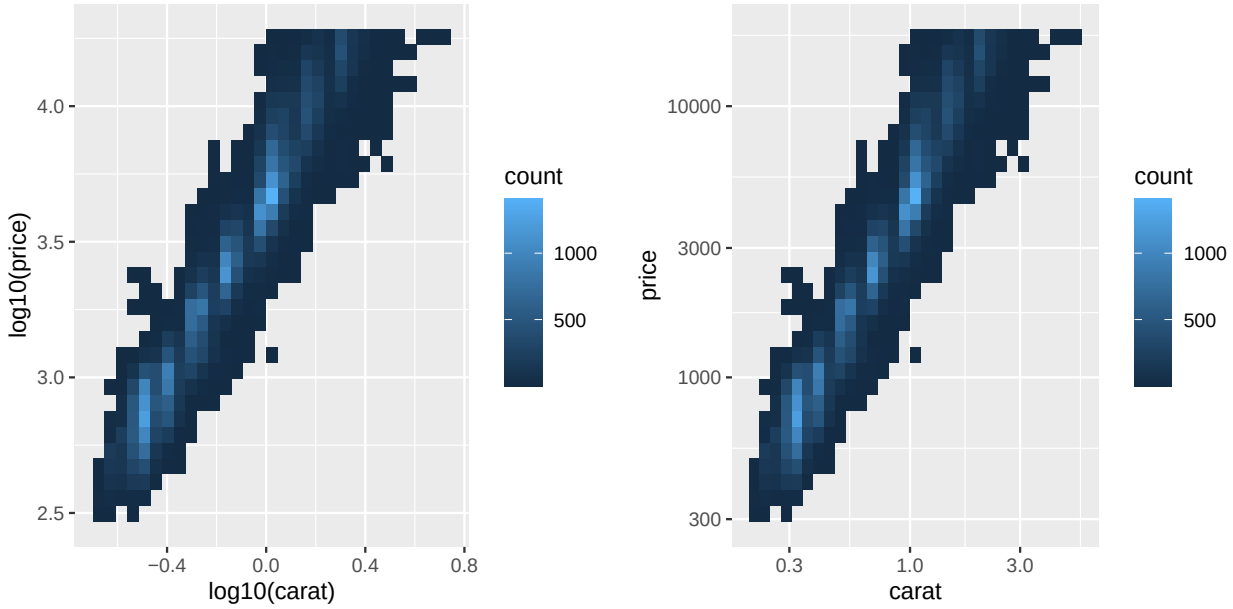
```
{r legend_and_display_control, echo = FALSE,     fig.asp = 1,     fig.align = "default",
out.width = "50%",     fig.width = 4}
```



And, our aesthetically pleasing car plot again with legend control added.

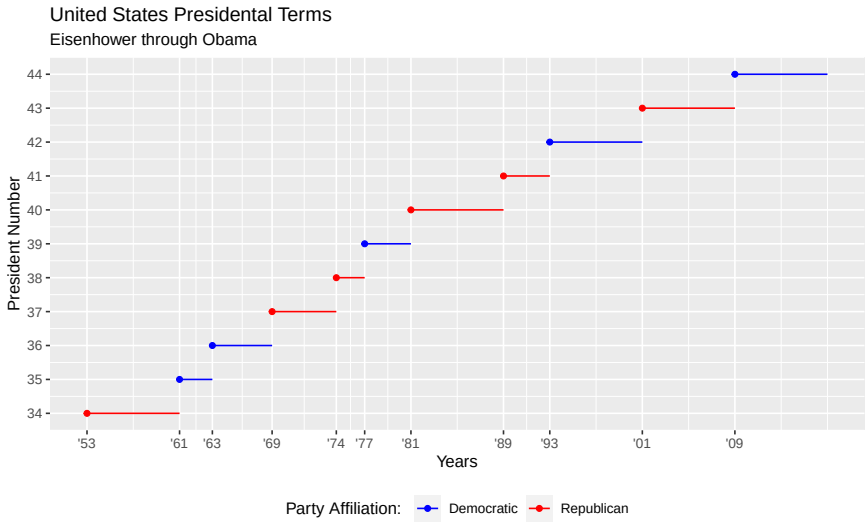


For plots that use log scale of underlying variable, it is a better - from a labeling perspective - to use the scale control geoms (e.g., `scale_x_log10()` and `scale_y_log10()`) versus the log adjusted variables (e.g., `aes(log10(carat), log10(price))`).

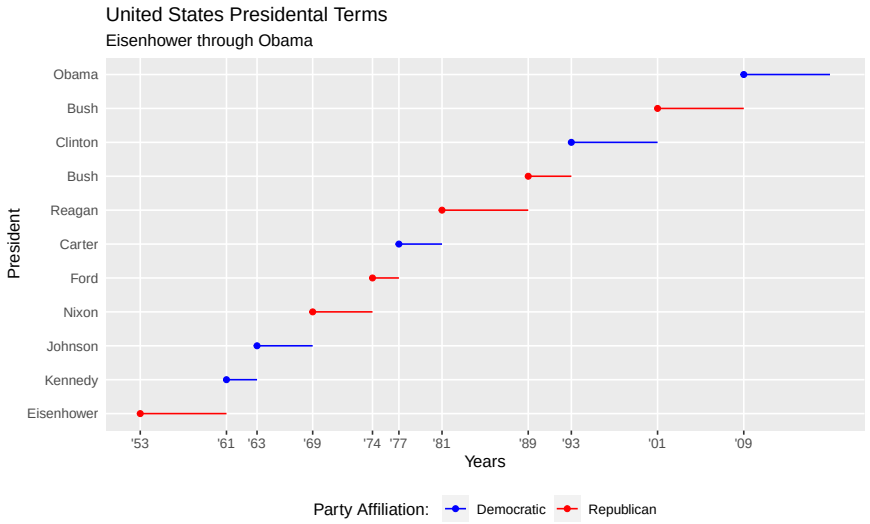


The latter plot is displayed in the log dimension space, but with the variable name and axis label markings preserved from the underlying data.

This is an *obvious* aesthetically pleasing addtion to our Presidential Terms plot which demonstrates some color control options.



And this adds in all of the other Presidential Terms plot improvement from question 2 in the 28.4.4 Exercises.



The following example shows the control of various aesthetics across sub-plots from similar data.