

Explore and Visualize2

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Lets continue with , Explore and Visualize

This week we will finish reading Chapter 3 and discuss Chapter 4.

Faceting

From the authors.

“... particularly useful for categorical variables, is to split your plot into facets, subplots that each display one subset of the data.”

Geometric shapes

How to add a smoothing line to a scatterplot?

```
ggplot(data = mpg) +
```

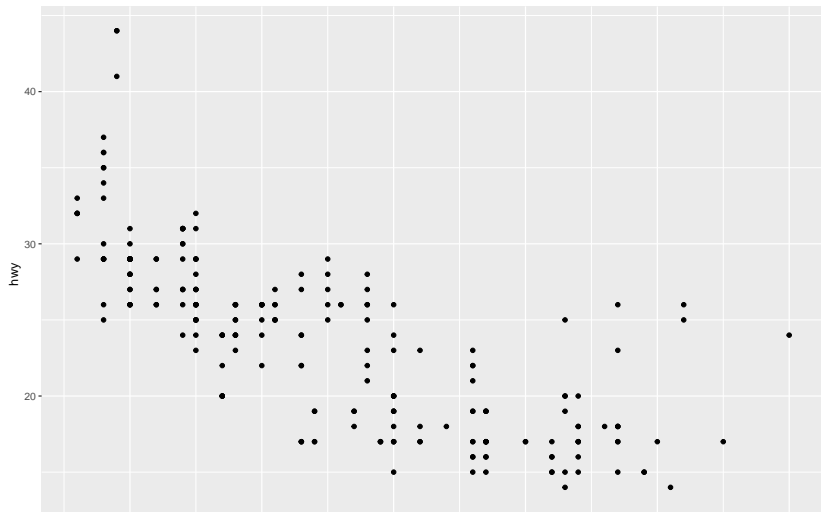
```
  geom_point(mapping = aes(x = displ, y = hwy))
```

```
ggplot(data = mpg) +
```

```
  geom_smooth(mapping = aes(x = displ, y = hwy))
```

left plot

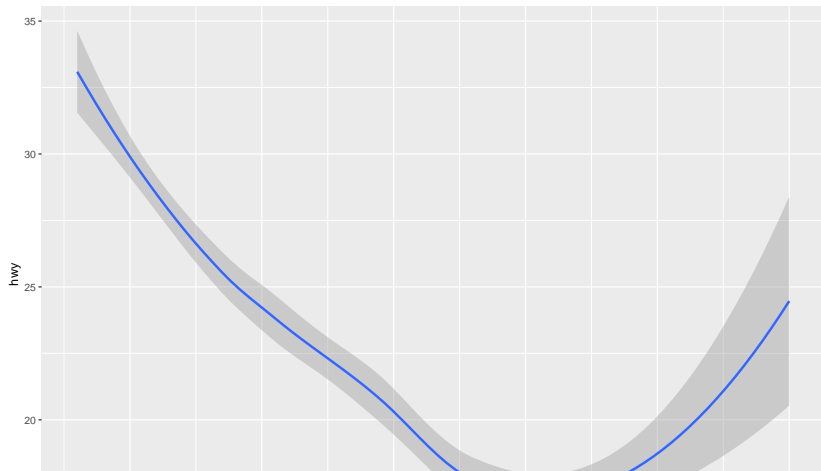
```
library(tidyverse)
ggplot(data = mpg) +
  geom_point(mapping = aes(x = displ, y = hwy))
```



right plot

```
ggplot(data = mpg) +  
  geom_smooth(mapping = aes(x = displ, y = hwy))
```

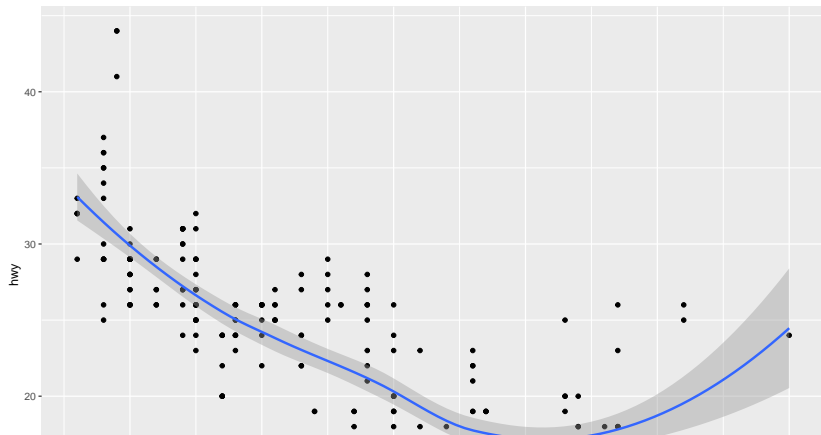
`geom_smooth()` using method = 'loess' and formula 'y ~



together

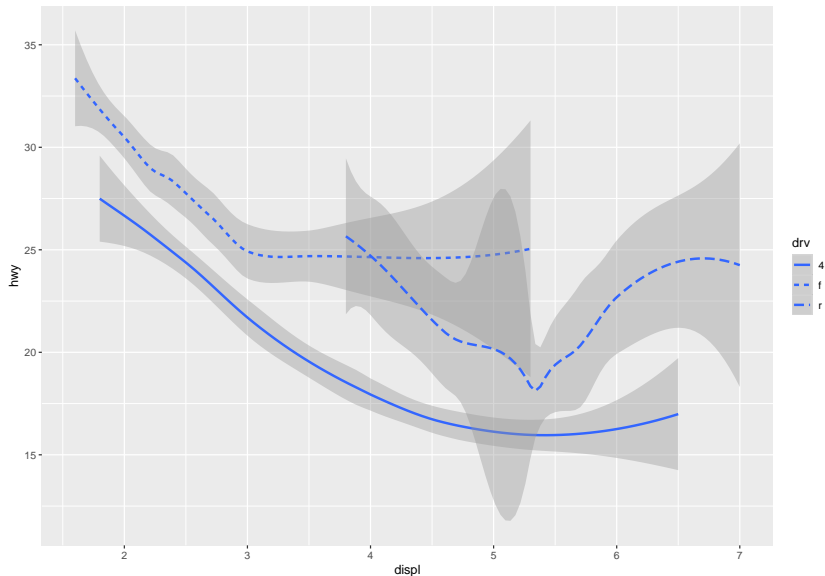
```
ggplot(data = mpg) +  
  geom_point(mapping = aes(x = displ, y = hwy)) +  
  geom_smooth(mapping = aes(x = displ, y = hwy))
```

`geom_smooth()` using method = 'loess' and formula 'y ~

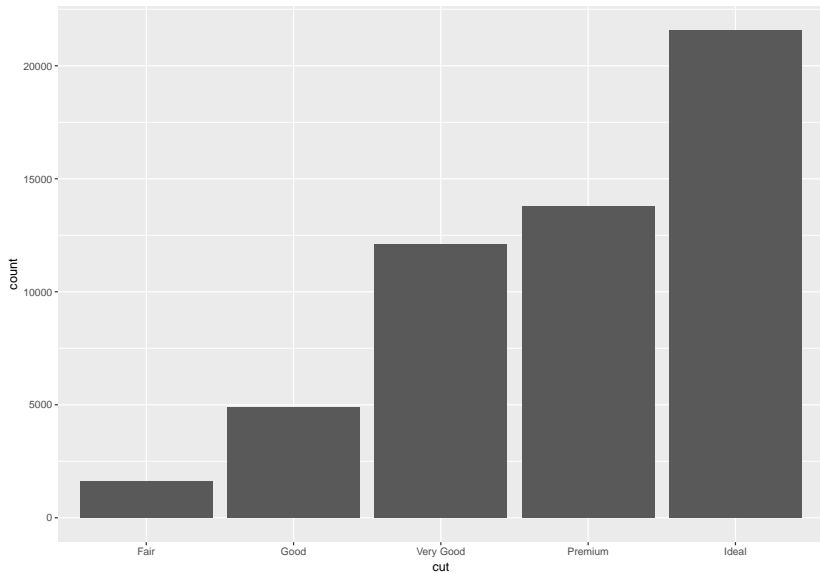


Multiple smoothing lines

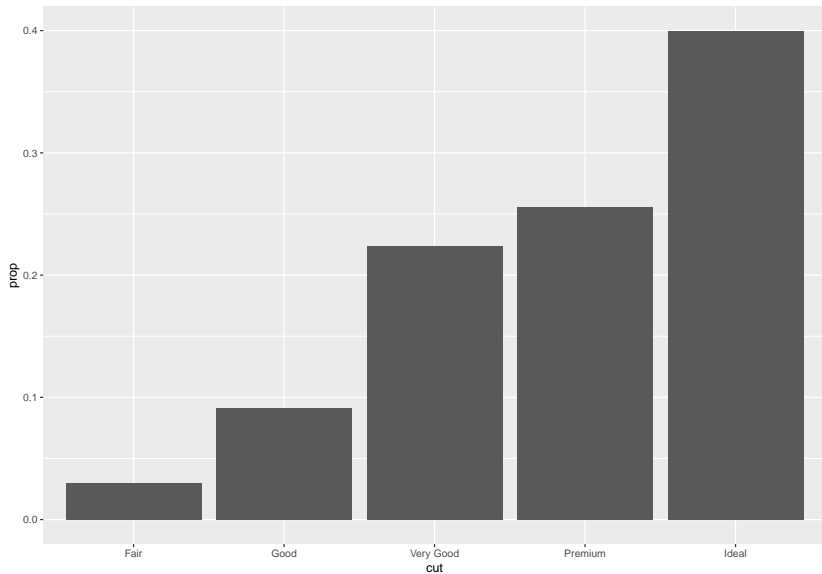
```
## `geom_smooth()` using method = 'loess' and formula 'y ~
```



Statistical transformations



Proportions



Position adjustment

“identity”, “dodge” or “fill”

