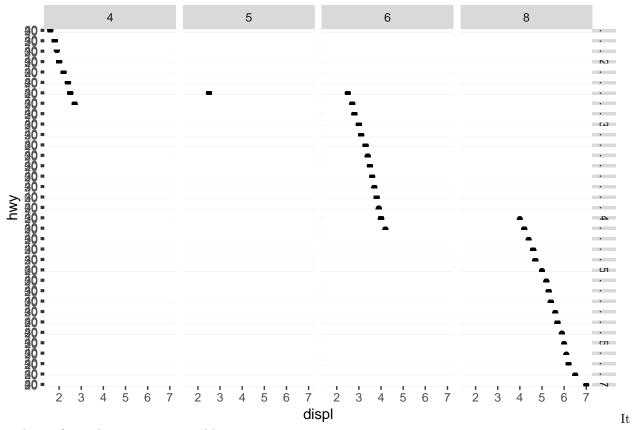
r4ds Ex 3.5.1 MW 2019/05/12

3.2.4

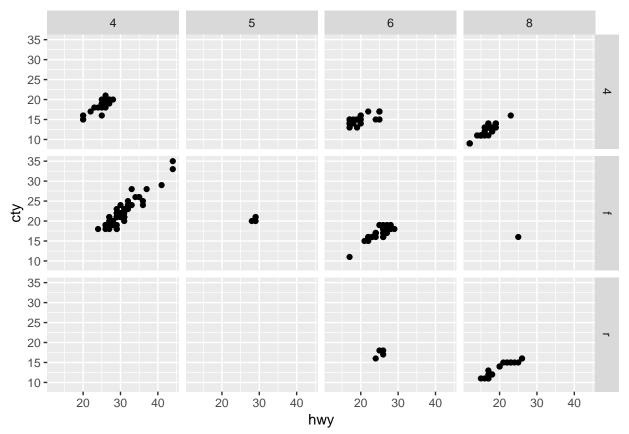
1



is drawn for each continuous variable.

 $\mathbf{2}$

```
ggplot(data=mpg) +
geom_point(mapping=aes(x=hwy, y=cty)) +
facet_grid(drv ~ cyl)
```



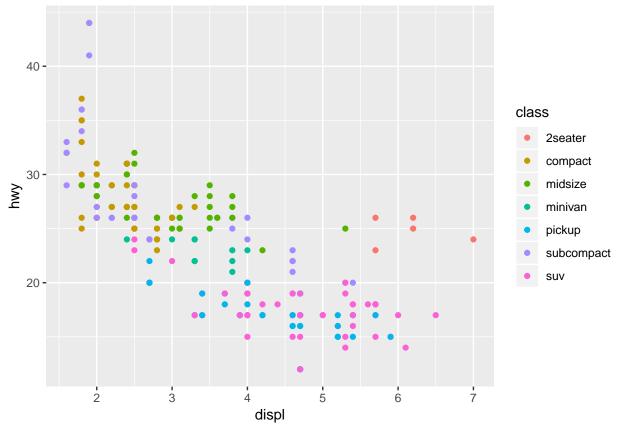
The empty cells shows no combinations of drv and cyl in itself.

3

. means ignoring dimensions. So, $\mathtt{drv}\,\,\boldsymbol{\,\scriptstyle{\sim}}\,\,$. facet only $\mathtt{drv}.$

4

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



Colorized by class. ### Facet #### advantage - Friendly to color blinders. - Easy to see the relationship within class

disadvantage

• Increase the number of graphs by the number of catagories.

Color

advantage

• Easy to see the relationship between class

disadvantage

• Difficult to see if the number of o¥bservation increases

5

...nrow, ncol: Number of rows and columns. Because facet_grid automatically determined rows and cols.

6

If you don't use unique values, it's complicated.