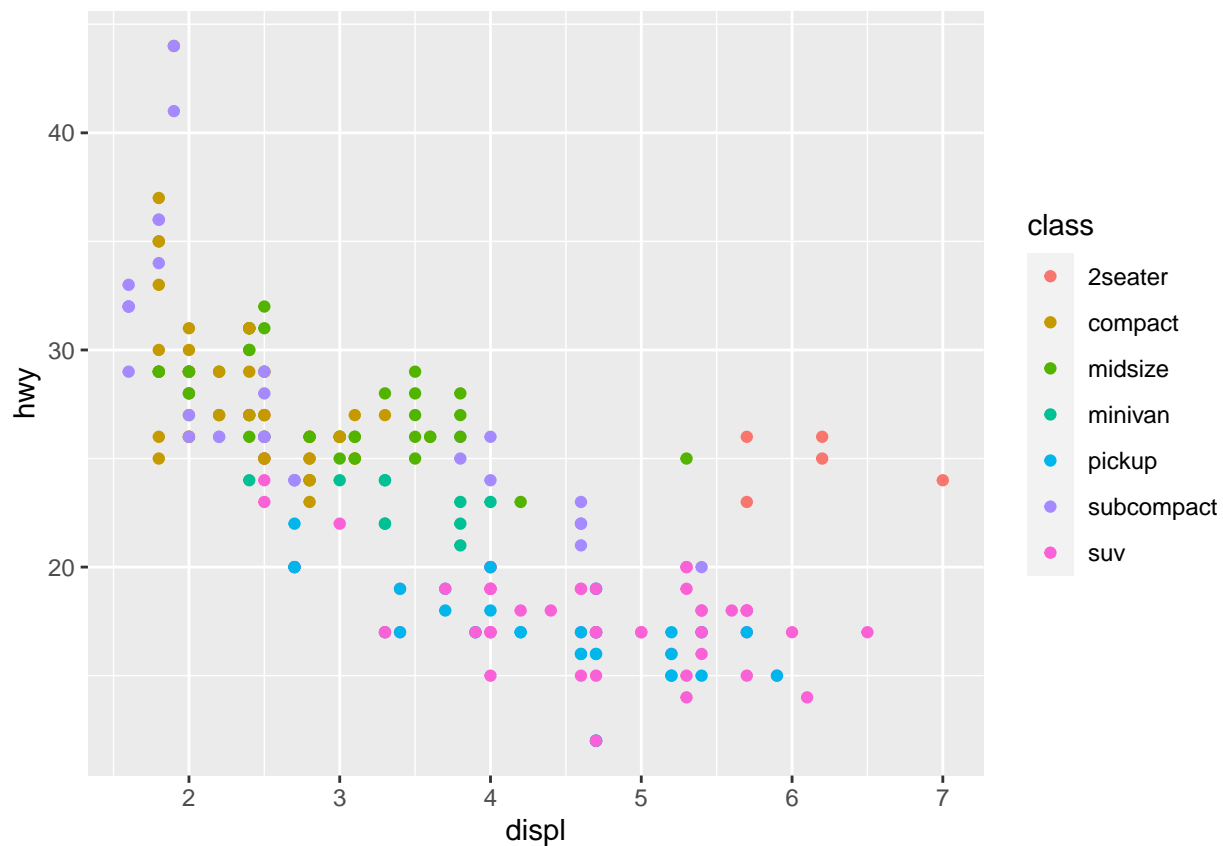


report.R

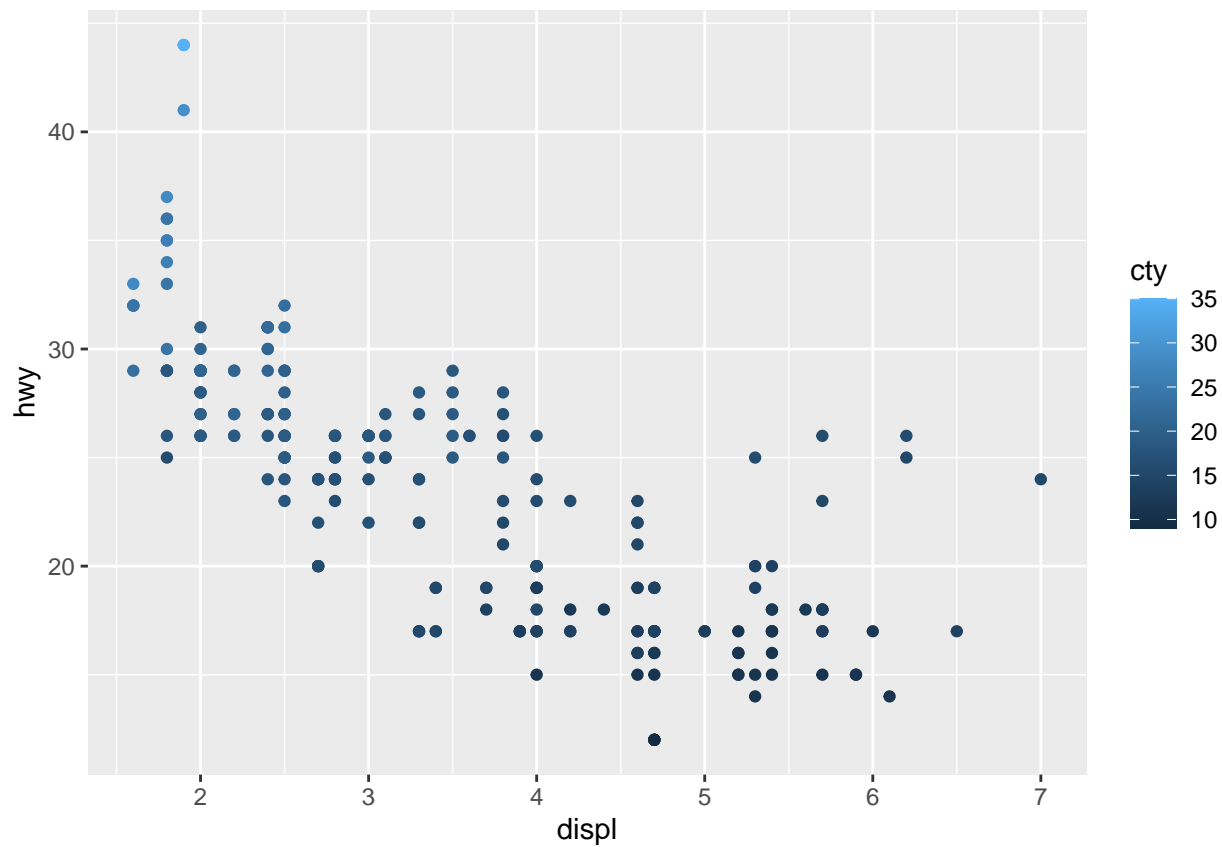
rstudio-user

2021-08-12

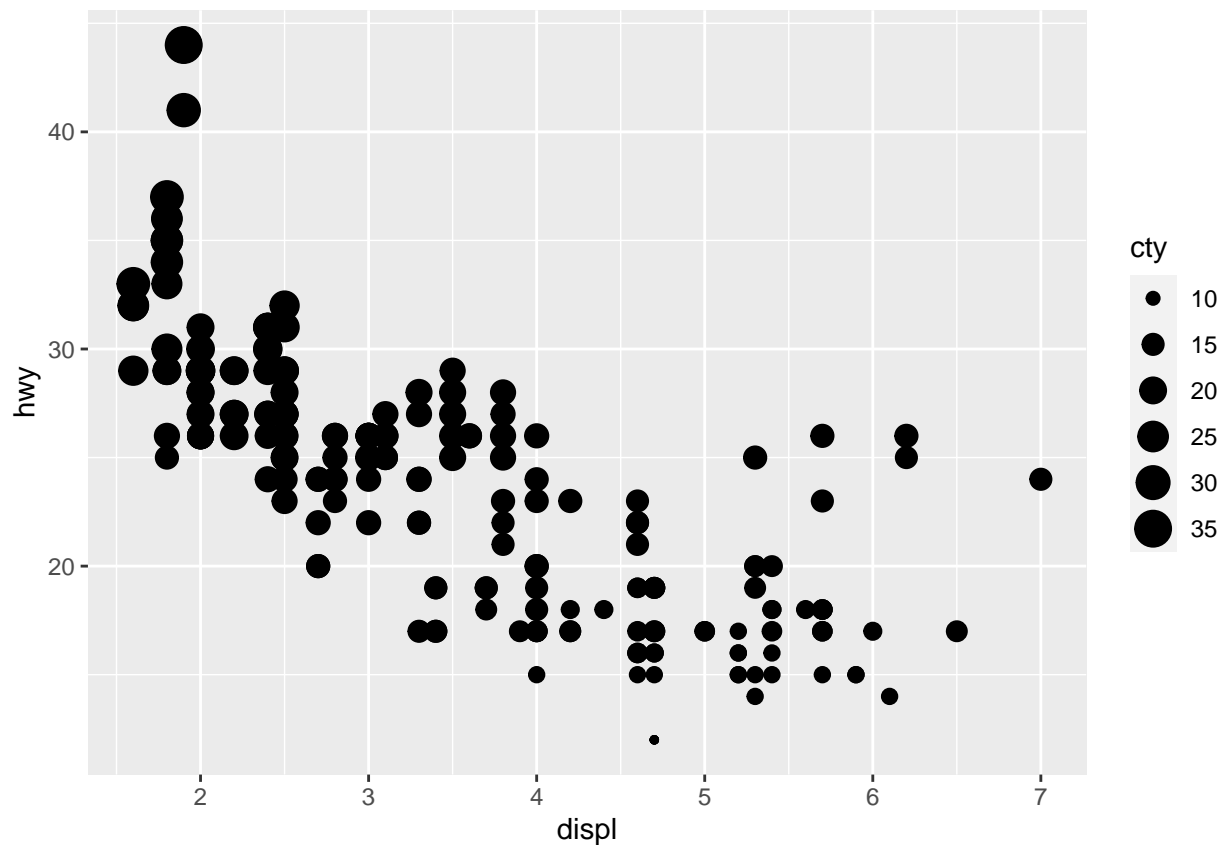
```
library(ggplot2)
ggplot(data = mpg) +
  geom_point(mapping = aes(x = displ, y = hwy, color = class ))
```



```
#adding third variable class and applying a color(British - colour) value for it. All cars that belong
#alternative is size = class , though it will not show class that obvious: using size for a discrete variable
#Next alternative is transparency of the points alpha = class, it is not advised for a discrete variable
#Alternative shape = class, restriction up to 6 discrete values, more than six is difficult to discriminate
#using different aesthetics for continuous variables, like cty
#applying color, not really informative, but shows graduate change of the color
ggplot(data = mpg) +
  geom_point(mapping = aes(x = displ, y = hwy, color = cty ))
```



```
#applying size to cty  
ggplot(data = mpg)+  
  geom_point(mapping = aes(x = displ, y = hwy, size = cty))
```

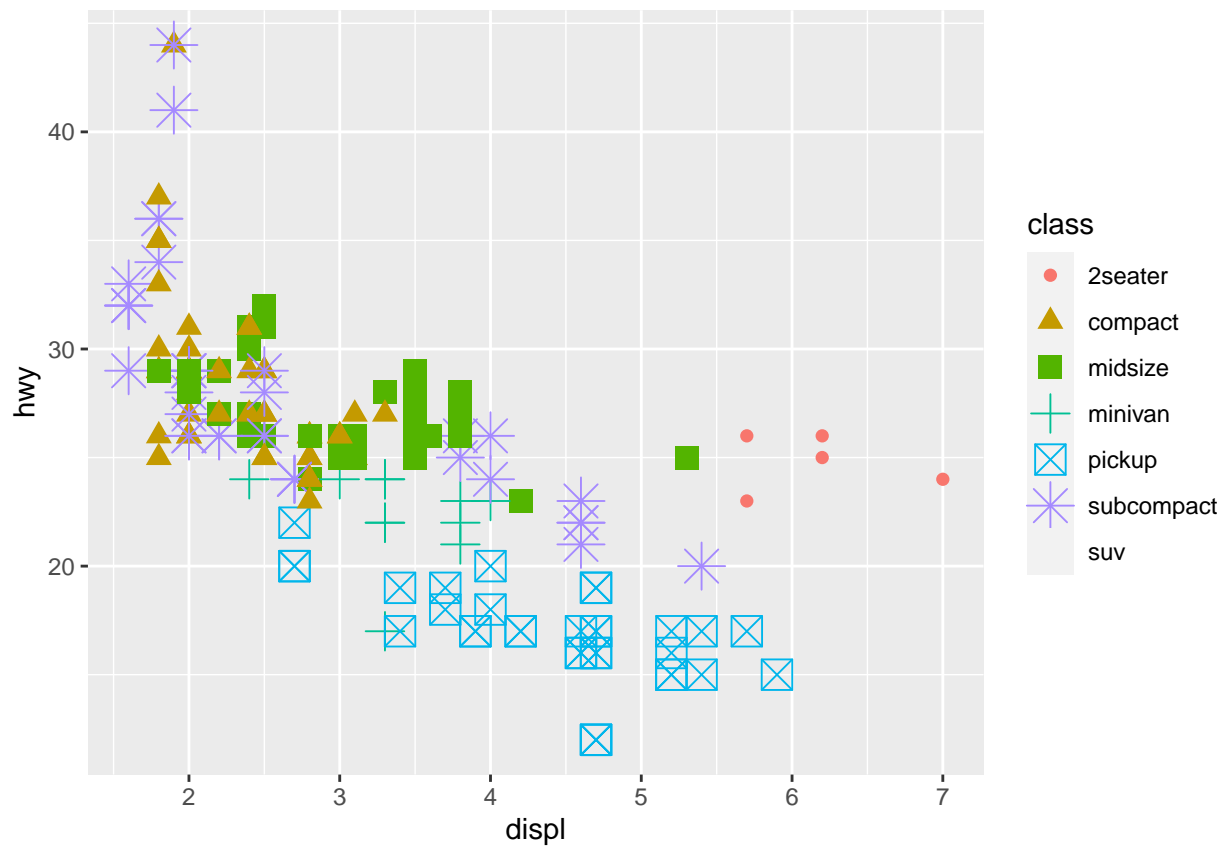


```
#applying variable to multiple aesthetics in ggplot2
ggplot(data = mpg) +
  geom_point(mapping = aes (x = displ, y = hwy, color = class, size = class, shape = class))
```

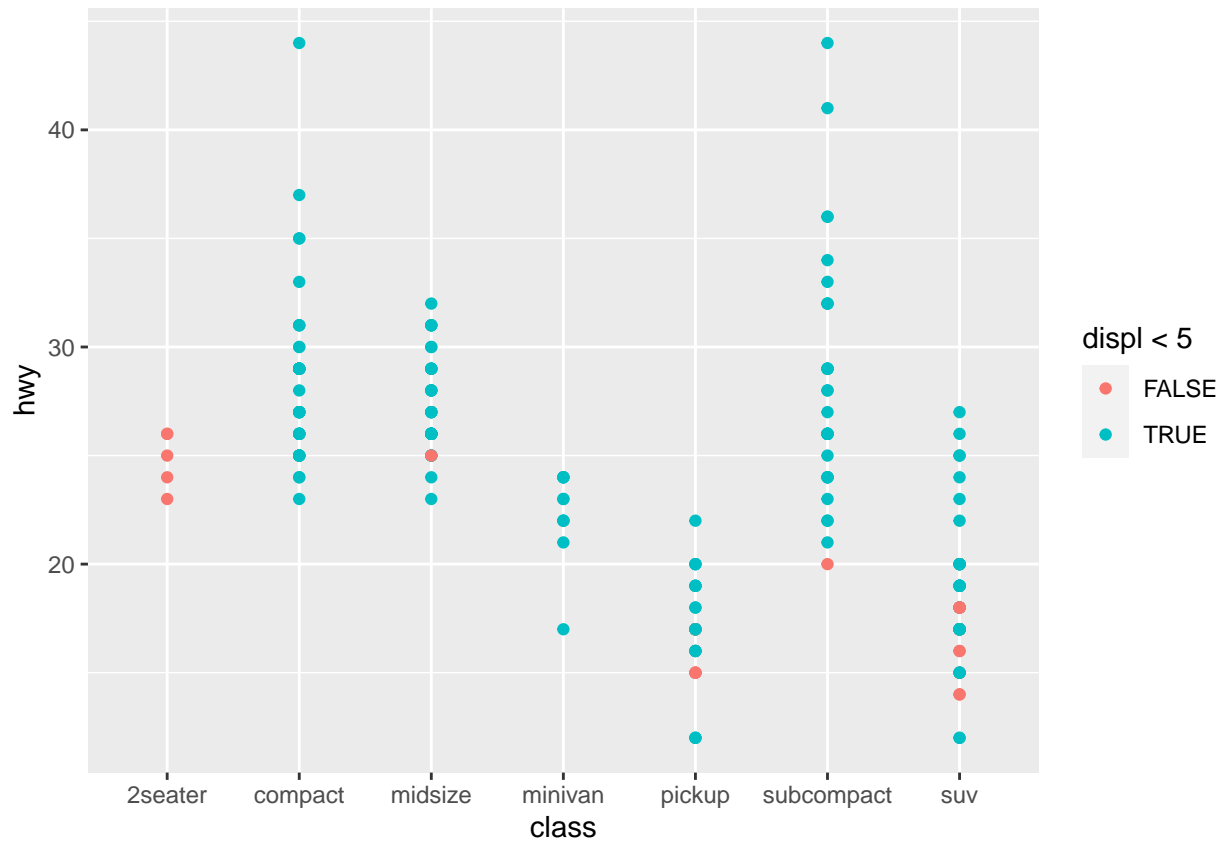
```
## Warning: Using size for a discrete variable is not advised.
```

```
## Warning: The shape palette can deal with a maximum of 6 discrete values because
## more than 6 becomes difficult to discriminate; you have 7. Consider
## specifying shapes manually if you must have them.
```

```
## Warning: Removed 62 rows containing missing values (geom_point).
```



```
#aes can compare if a statement is true or false and show results based on that
ggplot(data = mpg) +
  geom_point(mapping = aes(x = class, y = hwy, color = displ < 5))
```



```
#change aes color (blue, red, green etc.)
ggplot (data = mpg) +
  geom_point(mapping = aes (x = displ, y = hwy), colour = "green")
```

