

r4ds Ex 3.8.1

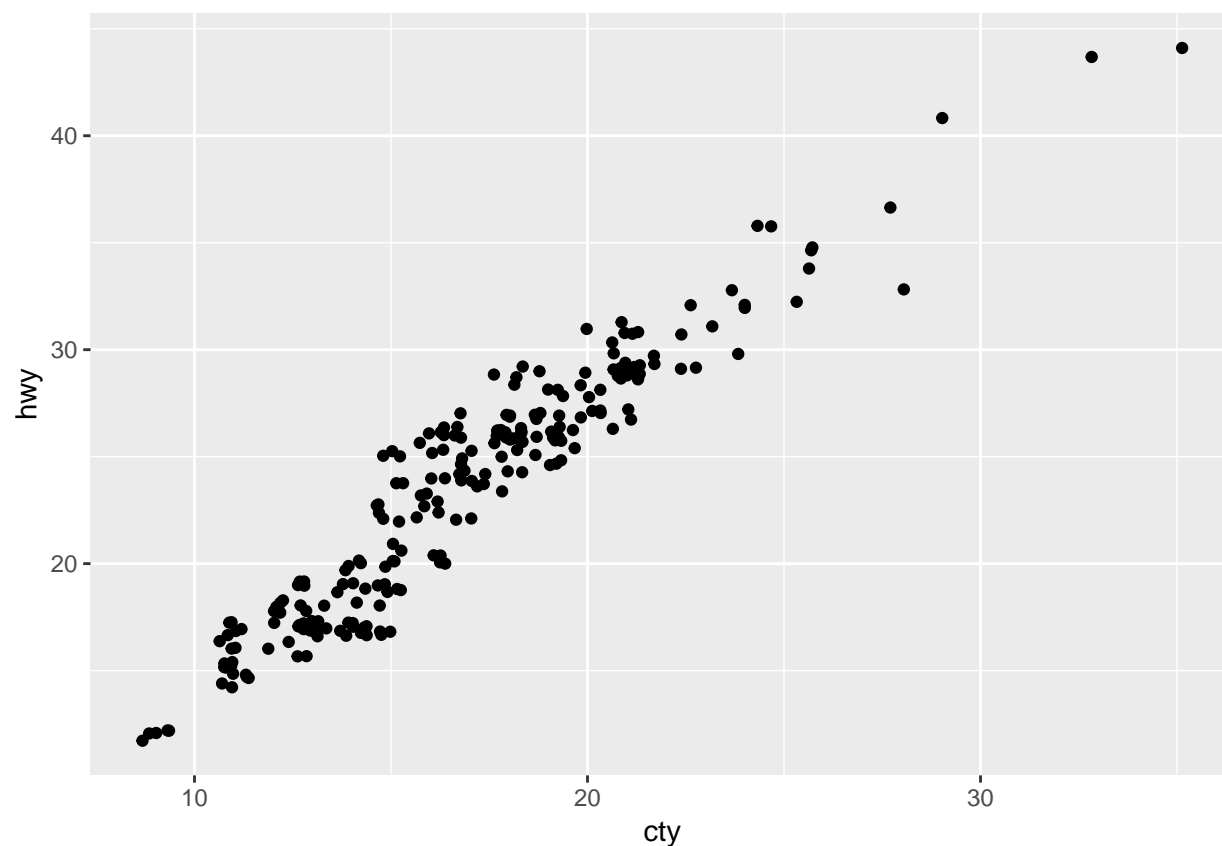
MW

2019/05/15

3.8.1

1

```
ggplot(data = mpg, mapping = aes(x = cty, y = hwy)) +  
  geom_point(position="jitter")
```



Points in above plot are overlapped.

2

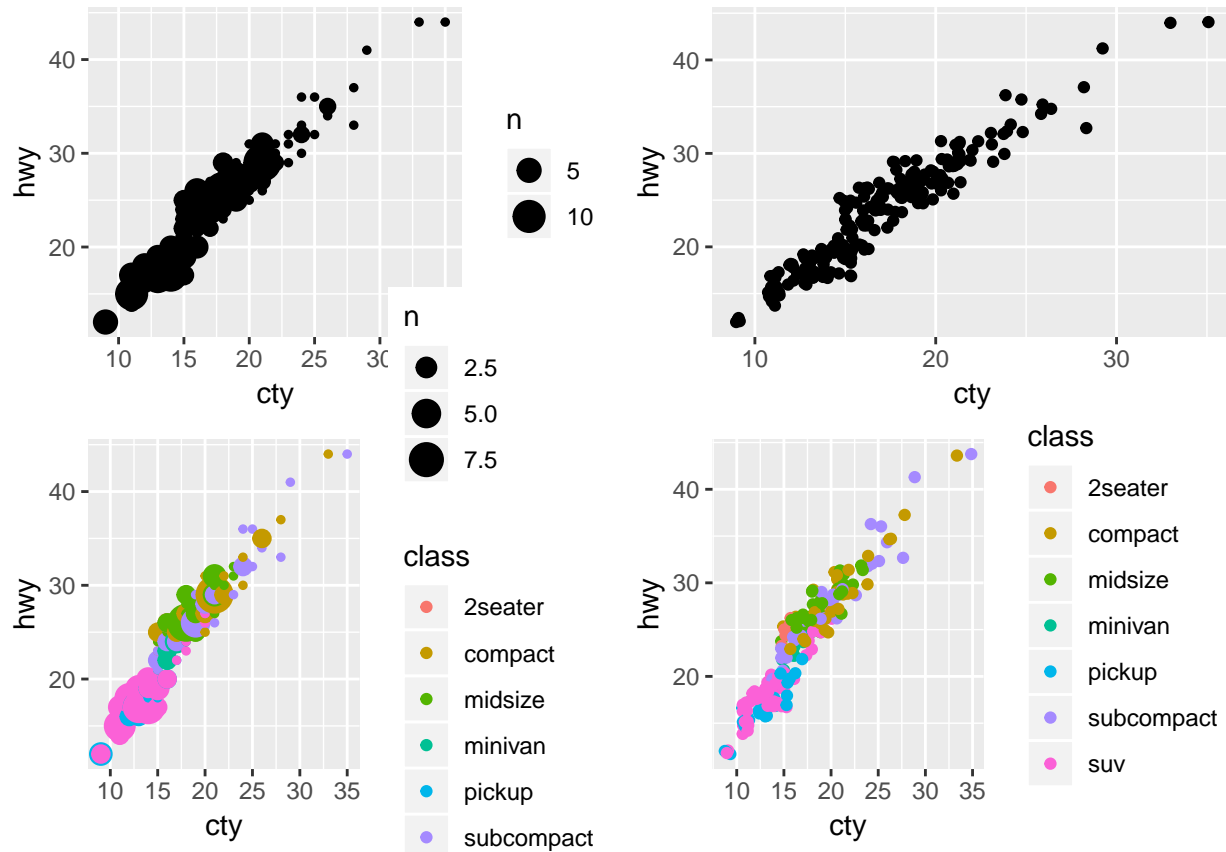
- **width:** determine the amount of vertical jitter.
- **height:** determine the amount of horizontal jitter. Both have 40% of the resolution of the data by default.

3

```
a <- ggplot(mpg, aes(x=cty, y=hwy)) +  
  geom_count()  
b <- ggplot(mpg, aes(x=cty, y=hwy)) +
```

```
geom_jitter()
c <- ggplot(mpg, aes(x=cty, y=hwy, color=class)) +
  geom_count()
d <- ggplot(mpg, aes(x=cty, y=hwy, color=class)) +
  geom_jitter()

gridExtra::grid.arrange(a, b, c, d, nrow=2)
```



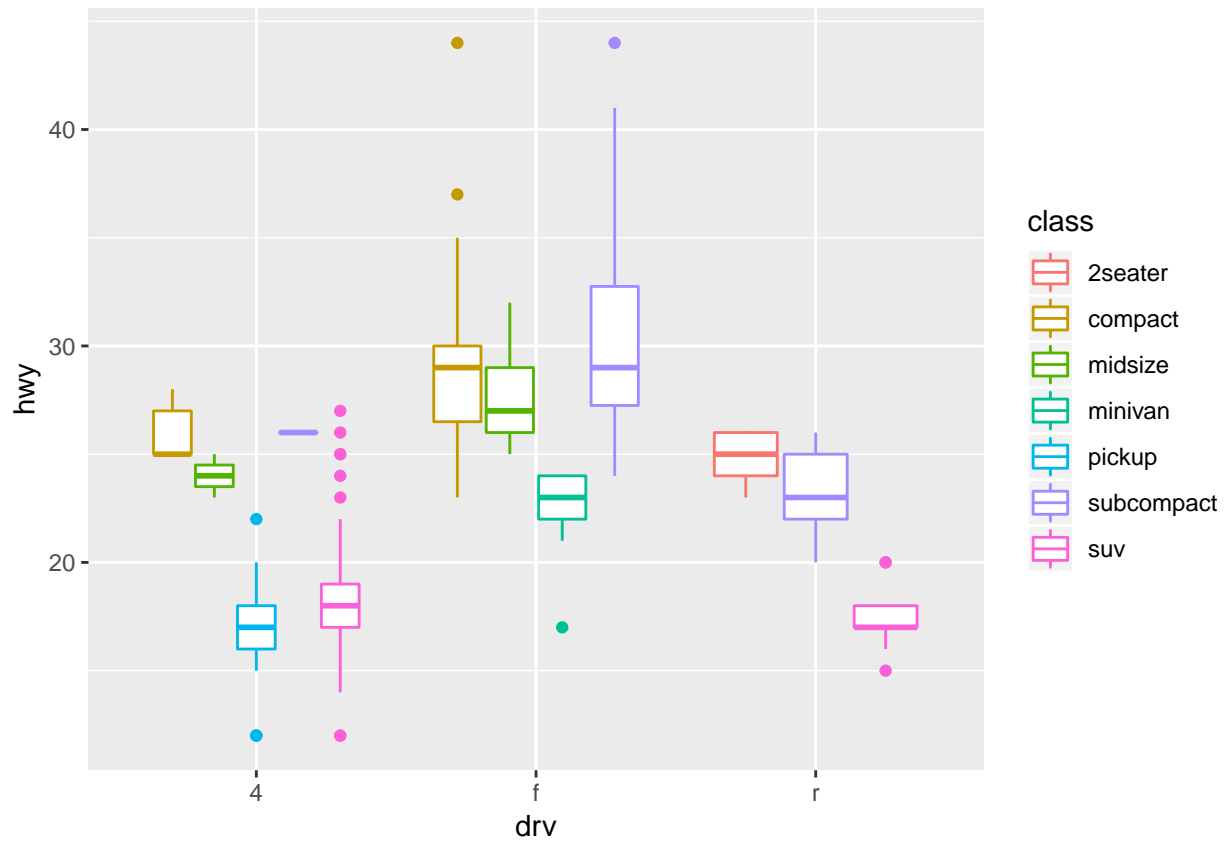
- Left columns: `geom_count`
- Right columns: `geom_jitter`
- Upper rows: Non-classificated by `class`
- Lower rows: Classificated by `class`

If you have lots of observations, you should use `geom_count` rather than `geom_jitter`. But you would use `geom_jitter` if you use combination `geom_` and `color`.

4

The default is `position="dodge2"` which control not horizontal but only vertical.

```
ggplot(data=mpg, aes(x=drv, y=hwy, color=class)) +
  geom_boxplot()
```



So

you set `position="identity"` when you want to align vertically.

```
ggplot(data=mpg, aes(x=drv, y=hwy, color=class)) +  
  geom_boxplot(position="identity")
```

