Shapes

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1 Shapes **1**

```
#Load packages
library(tidyverse)
library(ggsci) #for easy color scales
library(patchwork) #to make multi-panel plots
library(palmerpenguins) # our fave penguin friends :)
```

1 Shapes

ggplot gives us options to change point shape using the aesethic option 'shape' We can either change shape based on a characterstic of the data ('cyl', for example), make all the shapes the same, or manually control shape

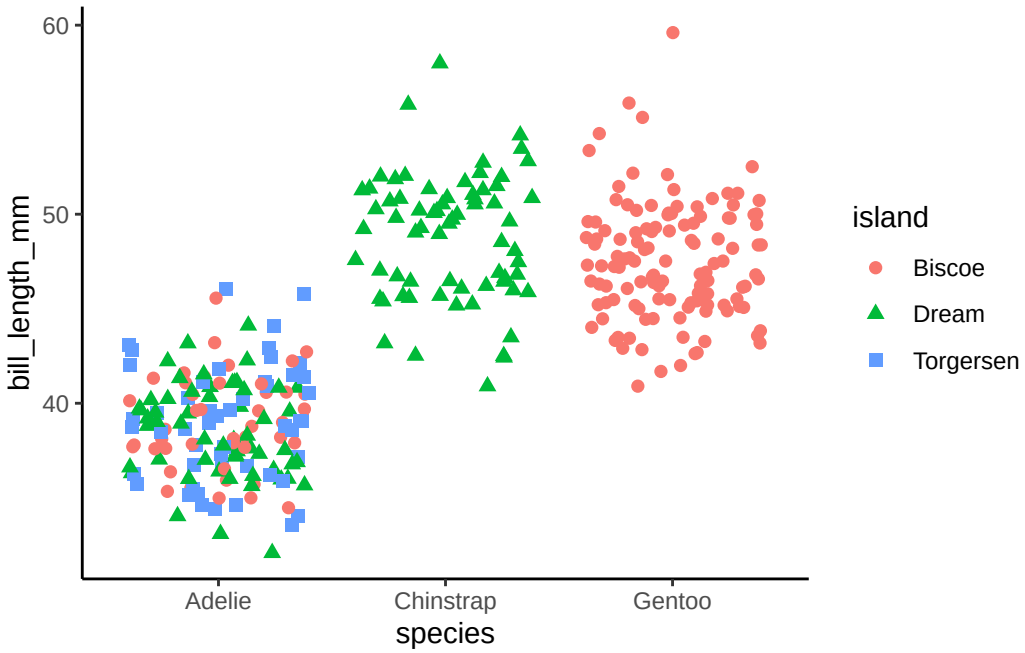
Below is a table of shape options:

Conditional Shape Change

```
ggplot(data=penguins, aes(x=species, y=bill_length_mm, color=island, shape=island))+
  geom_jitter(size=2)+
  theme_classic()
```

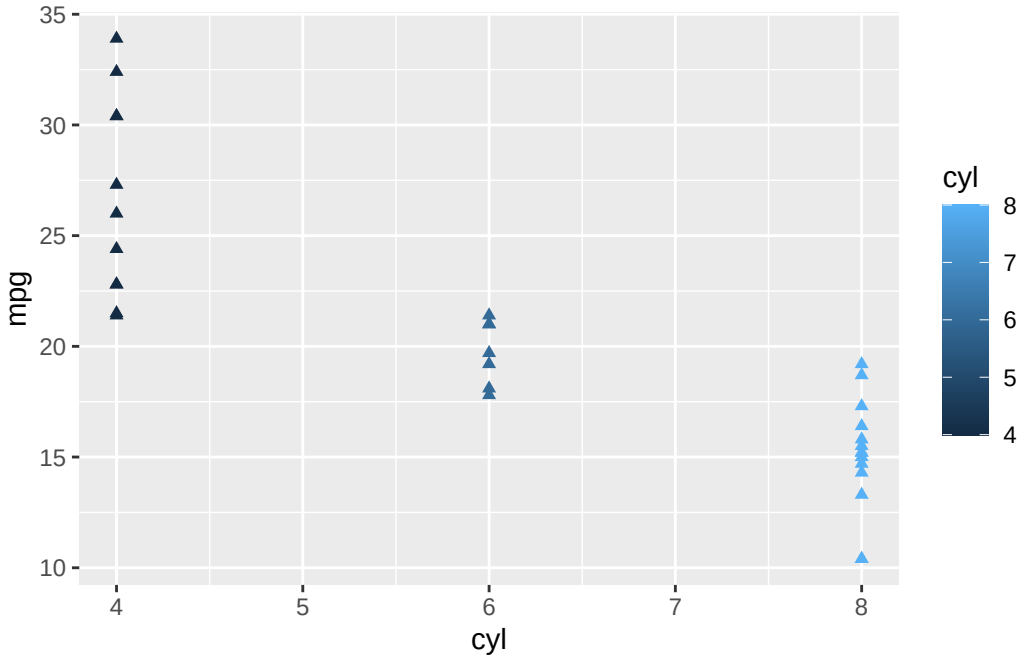
```
Warning: Removed 2 rows containing missing values (`geom_point()`).
```

Figure 1: ggplot shape options

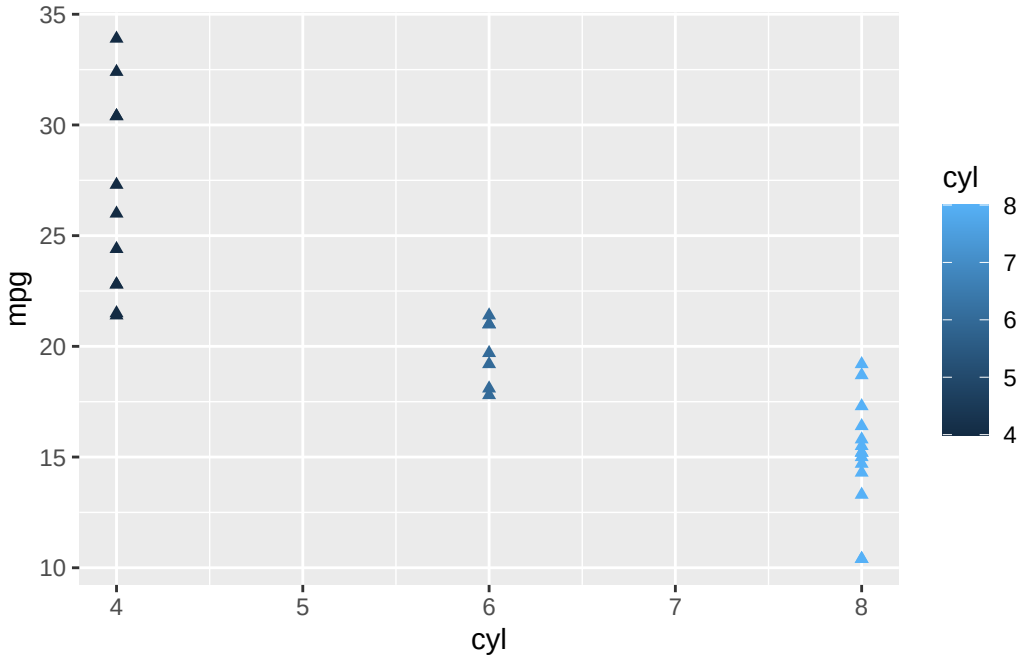


Change all shapes to triangles

```
ggplot(data=mtcars, aes(x=cyl, y=mpg, color=cyl))+
  geom_point(shape=17) #Here 'shape=' is inside the settings for geom_point. Note that it
```



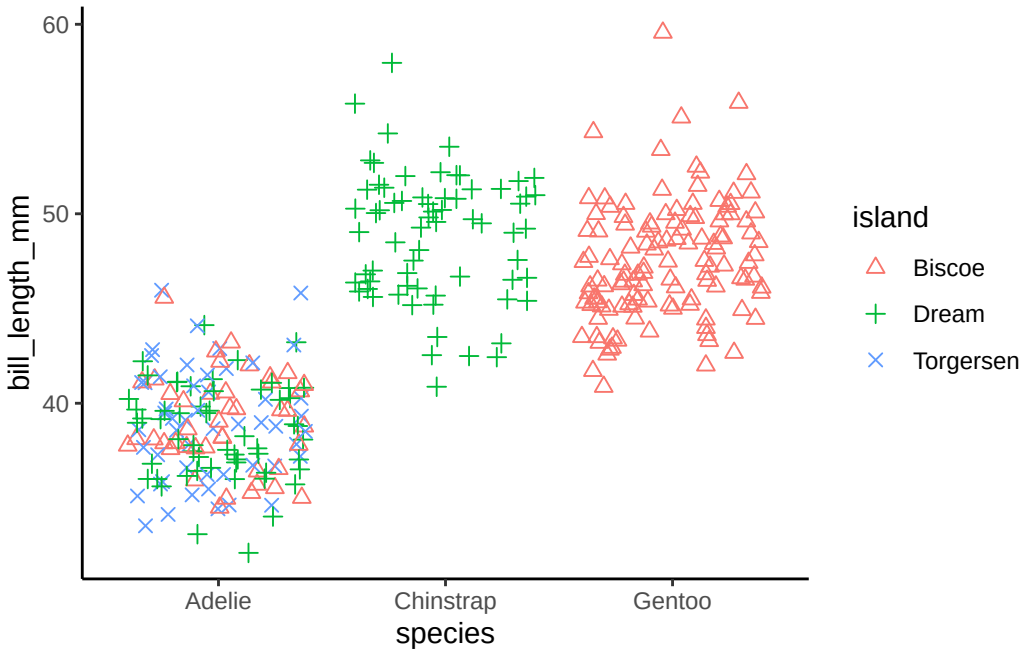

```
#example 2, same w/ different syntax
ggplot()+
  geom_point(data=mtcars, aes(x=cyl, y=mpg, color=cyl), shape=17)
```



Manual shape changes

```
ggplot(data=penguins, aes(x=species, y=bill_length_mm, color=island, shape=island))+
  geom_jitter(size=2)+
  theme_classic()+
  scale_shape_manual(values=c(2,3,4)) #scale_shape_manual allows us to choose shapes for e
```

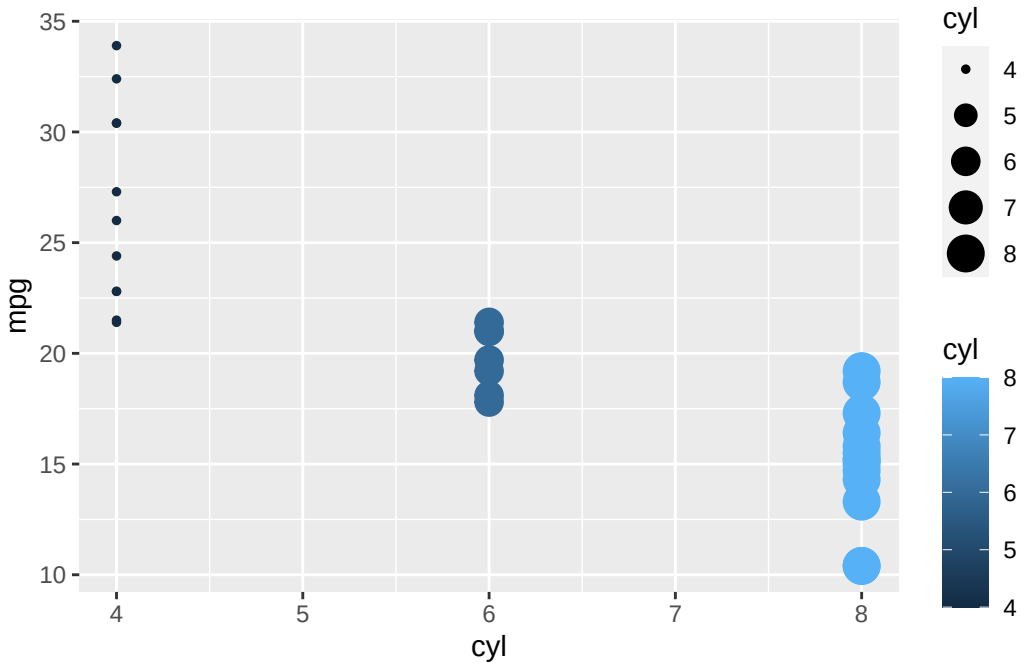
```
Warning: Removed 2 rows containing missing values (`geom_point()`).
```



Changing Size of points

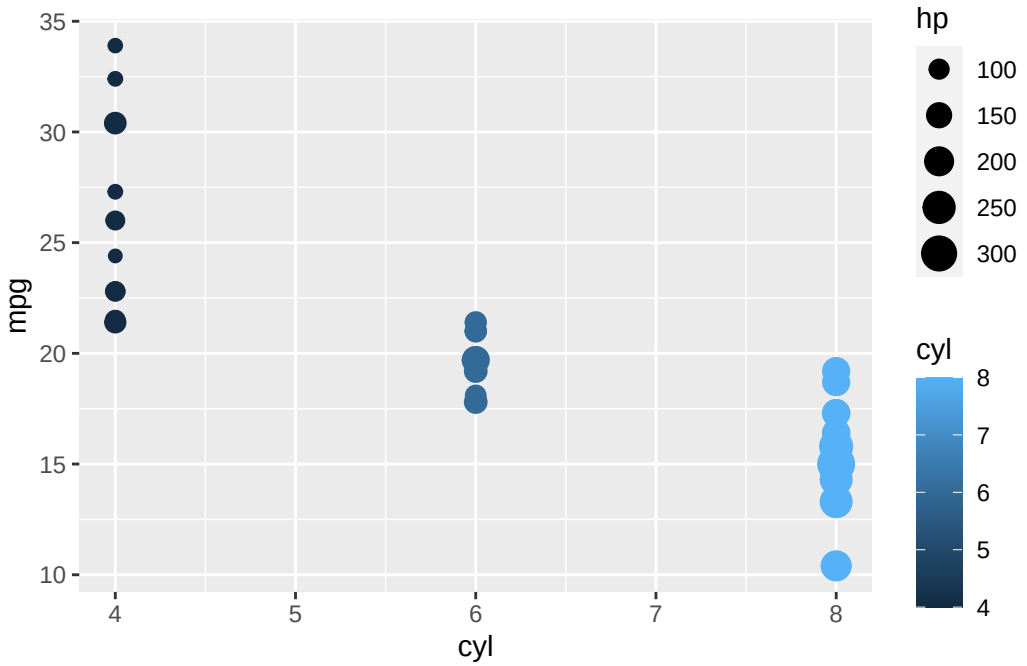
Conditional Shape Change

```
ggplot(data=mtcars, aes(x=cyl, y=mpg, color=cyl, size=cyl))+ #note that we added 'size=' t
  geom_point()
```



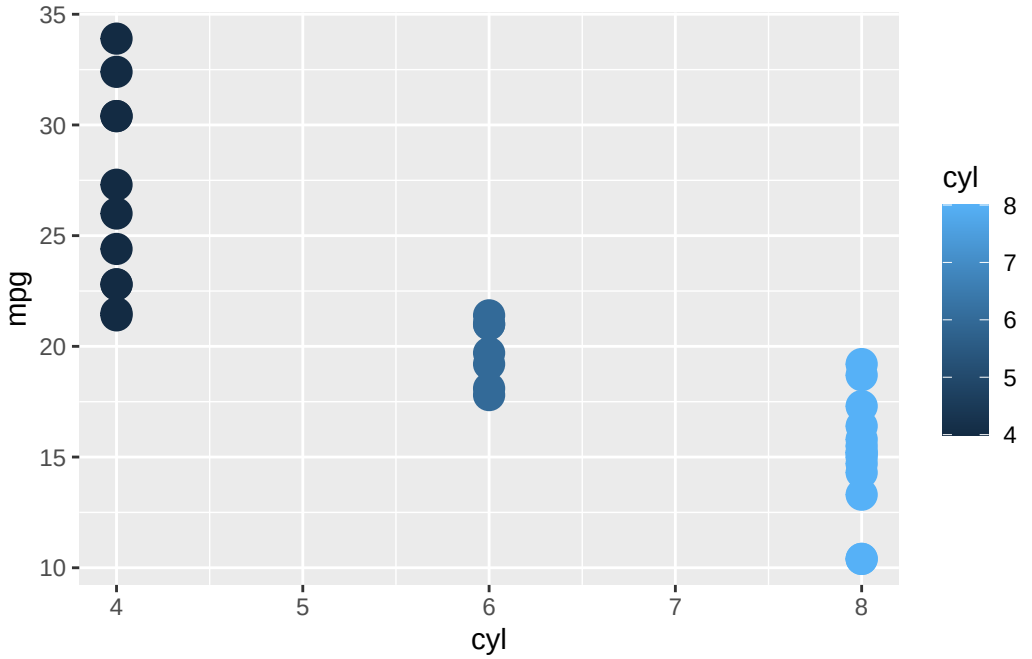

```
#note the warning message that using size for a discrete variable is not best practice.
#Instead, let's use the size to five us an idea of hp (a 3rd variable)

ggplot(data=mtcars, aes(x=cyl, y=mpg, color=cyl, size=hp))+ #note that we added 'size=' to
  geom_point()
```



Change size of all points (all points must be same size)

```
ggplot(data=mtcars, aes(x=cyl, y=mpg, color=cyl))+
  geom_point(size=5) #as w/ shape, point needs to be outside the aes() here.
```


35
30
25
20
15
10
mpg
4
5
6
7
8
cyl
cyl
8
7
6
5
4