

ggplot Part II

Workshop on Data Visualization in R

Lokesh Mano • 17-Apr-2023

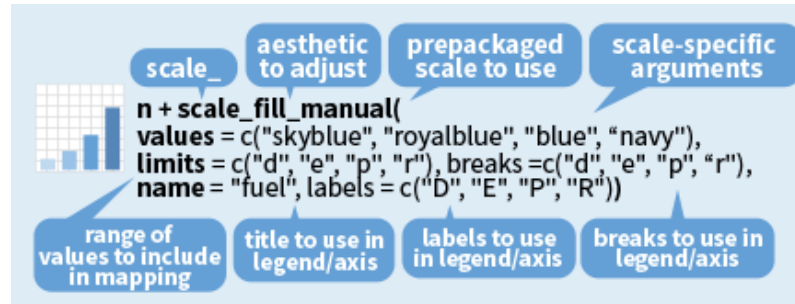
NBIS, SciLifeLab

Contents

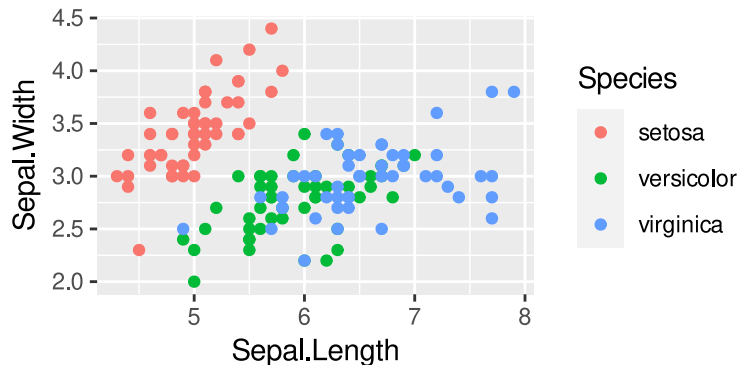
- Scales - color
- Scales - shape
- facet_wrap

Scales • Discrete Colors

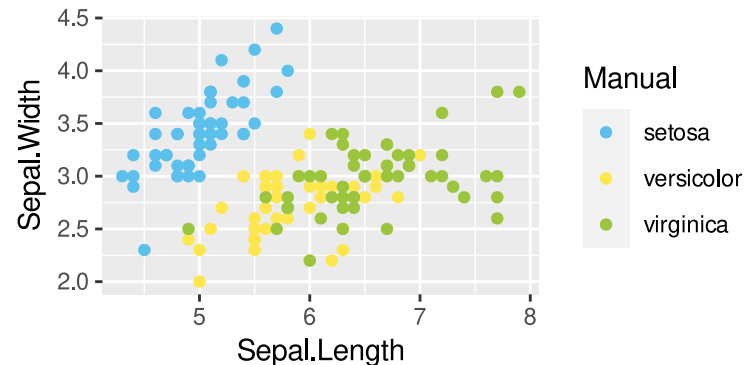
- scales: position, color, fill, size, shape, alpha, linetype
- syntax: `scale_<aesthetic>_<type>`



```
p <- ggplot(iris)+geom_point(aes(x=Sepal.Length, y=Sepal.Width, color=Species))
p
```



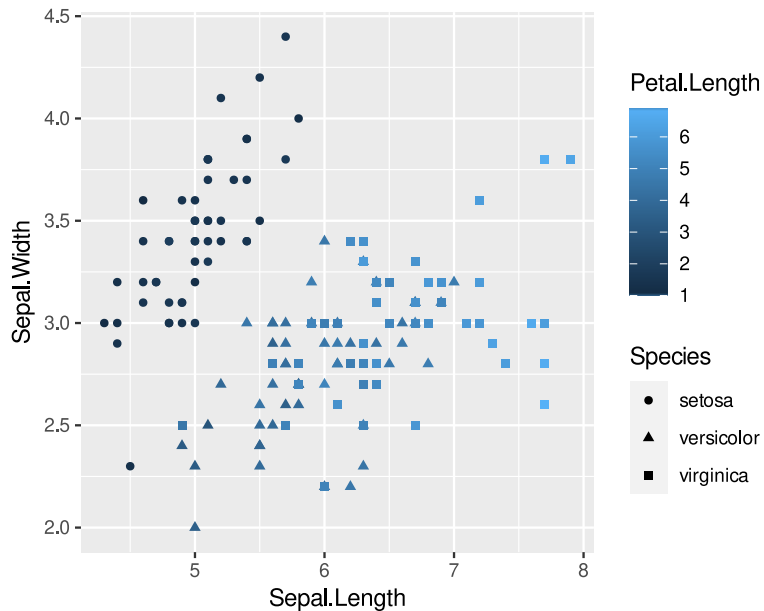
```
p + scale_color_manual(name="Manual", values=c("#5BC0EB", "#FDE74C", "#9BC53D"))
```



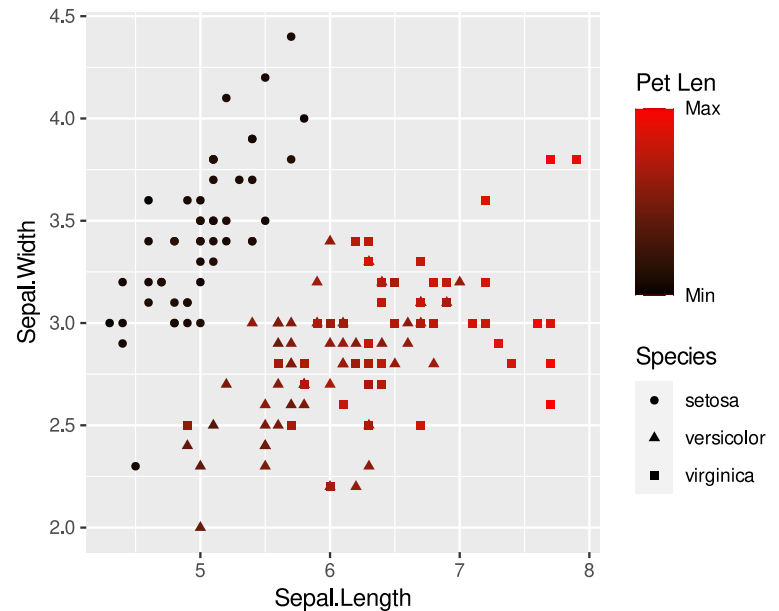
Scales • Continuous Colors

- In RStudio, type `scale_`, then press TAB

```
p <- ggplot(iris)+  
  geom_point(aes(x=Sepal.Length,  
                 y=Sepal.Width,  
                 shape=Species,color=Petal.Length))  
p
```

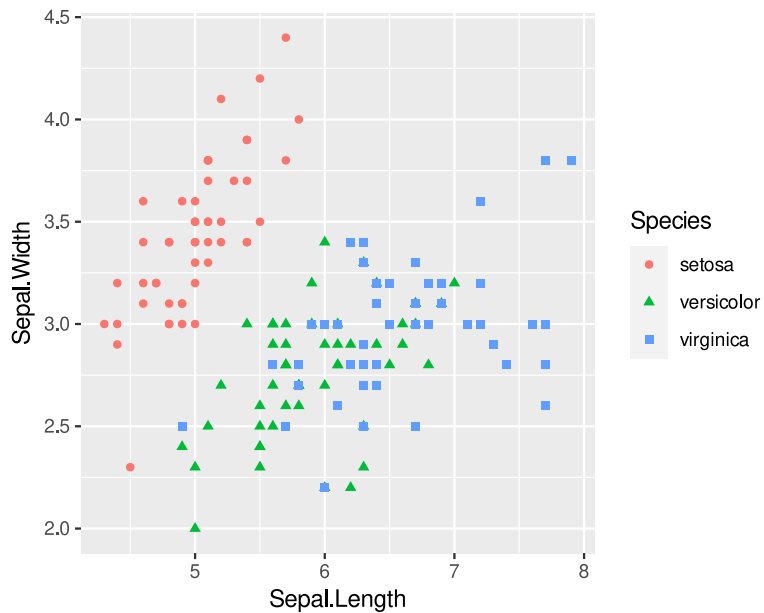


```
p +  
  scale_color_gradient(name="Pet Len",  
                      breaks=range(iris$Petal.Length),  
                      labels=c("Min", "Max"),  
                      low="black", high="red")
```



Scales • Shape

```
p <- ggplot(iris)+  
  geom_point(aes(x=Sepal.Length,  
                 y=Sepal.Width,  
                 shape=Species,color=Species))  
p
```



```
p +  
  scale_color_manual(name="New",  
                    values=c("blue","green","red"))+  
  scale_shape_manual(name="Bla",values=c(0,1,  
                                         2))
```

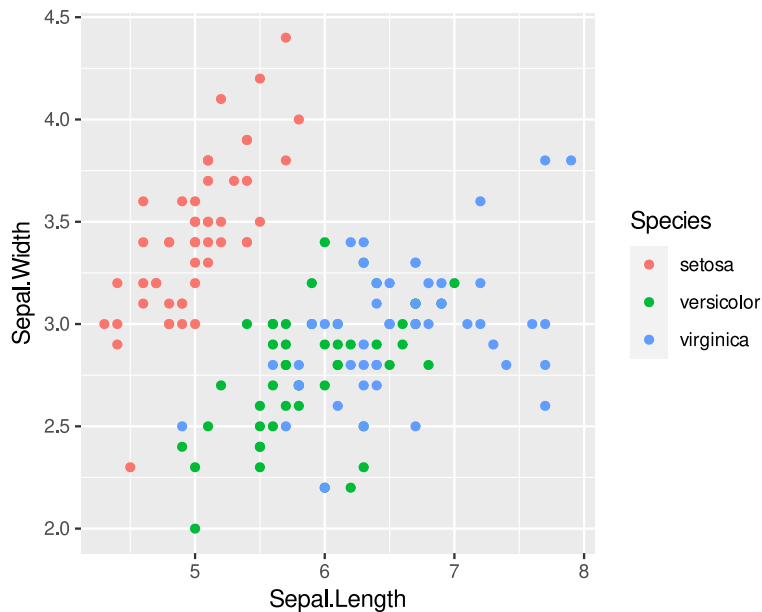


Facets • **facet_wrap**

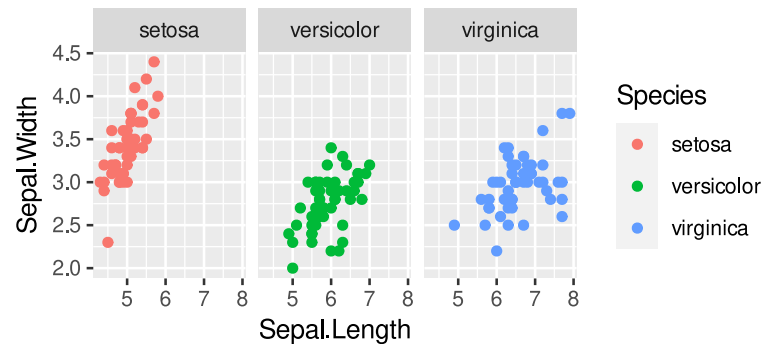
- Split to subplots based on variable(s)
- Facetting in one dimension

```
p <- ggplot(iris)+  
  geom_point(aes(x=Sepal.Length,  
                 y=Sepal.Width,  
                 color=Species))
```

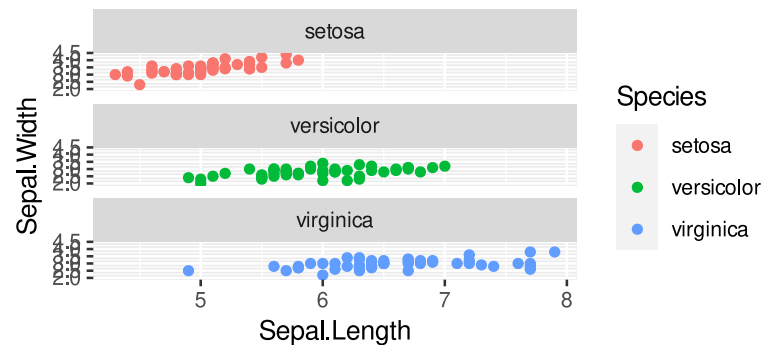
p



```
p + facet_wrap(~Species)
```



```
p + facet_wrap(~Species, nrow=3)
```





Thank you. Questions?

R version 4.1.3 (2022-03-10)

Platform: x86_64-pc-linux-gnu (64-bit)

OS: Ubuntu 22.04.2 LTS

Built on: 📅 17-Apr-2023 at 🕒 08:46:40

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