

ggplot Part II

Workshop on Data Visualization in R

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NBIS, SciLifeLab

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- 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
```



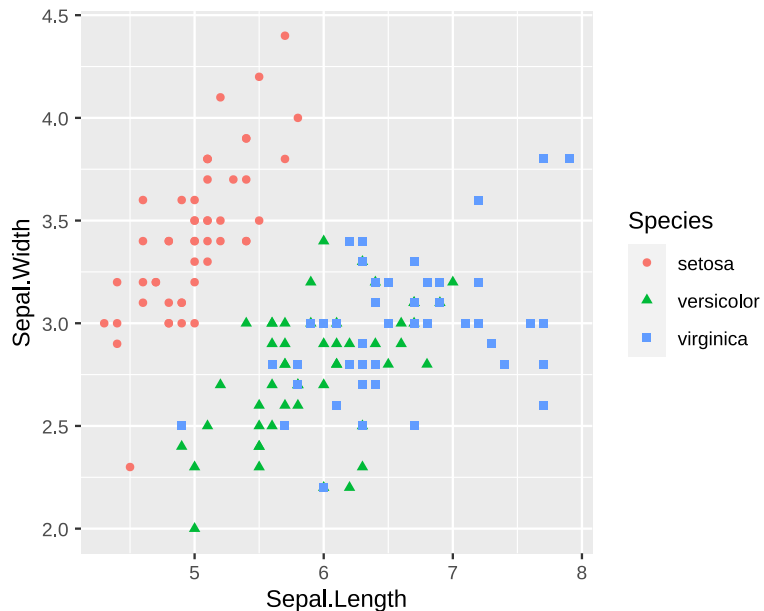
```
p +  
  scale_color_gradient(name="Pet Len",  
                       breaks=range(iris$Petal.Length),  
                       labels=c("Min", "Max"),  
                       low="black", high="red")
```



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,
```



Facets • **facet_wrap**

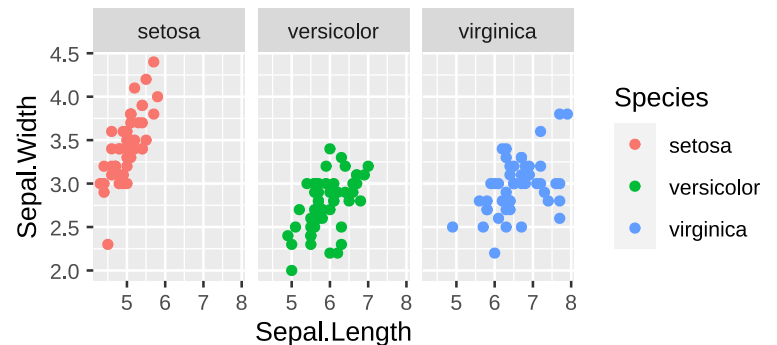
- Split to subplots based on variable(s)
- Facetting in one dimension

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

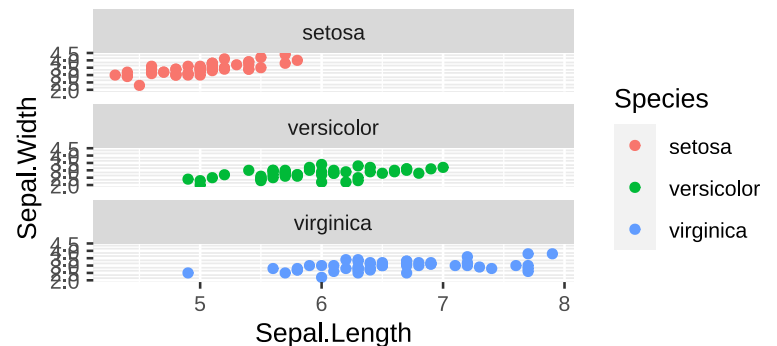
p



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



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





Thank you. Questions?

R version 4.1.2 (2021-11-01)

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

OS: Ubuntu 18.04.6 LTS

Built on : 📅 18-Jan-2022 at 🕒 14:34:31

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