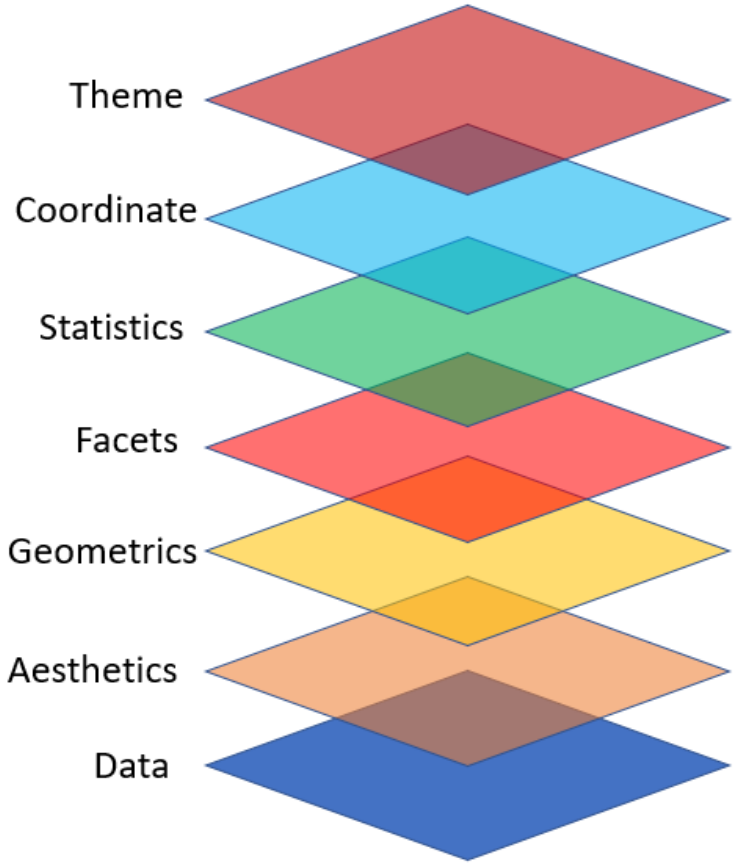
Librería Grafica ggplot2

Luis Fernando Delgado Munoz

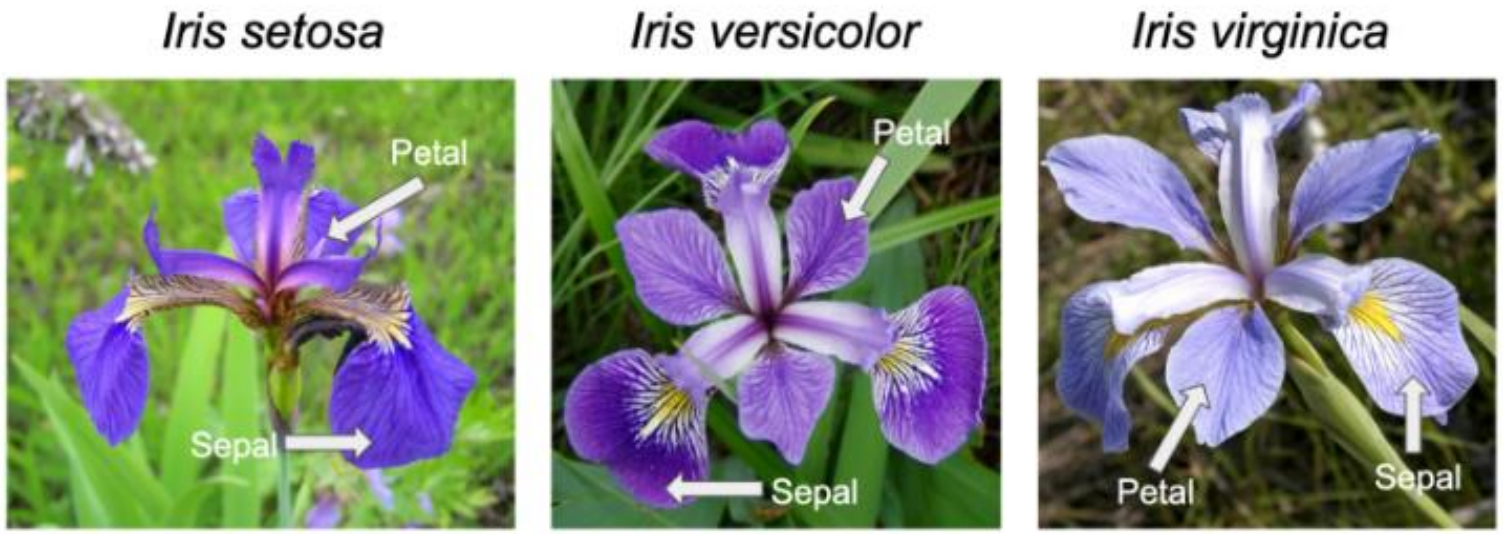
Estructura de un gráfico ggplot2

- Los gráficos están formados por distintas capas de elementos gramaticales
- Las capas se vinculan entre sí a través de un mapeo estético (aesthetic mapping)



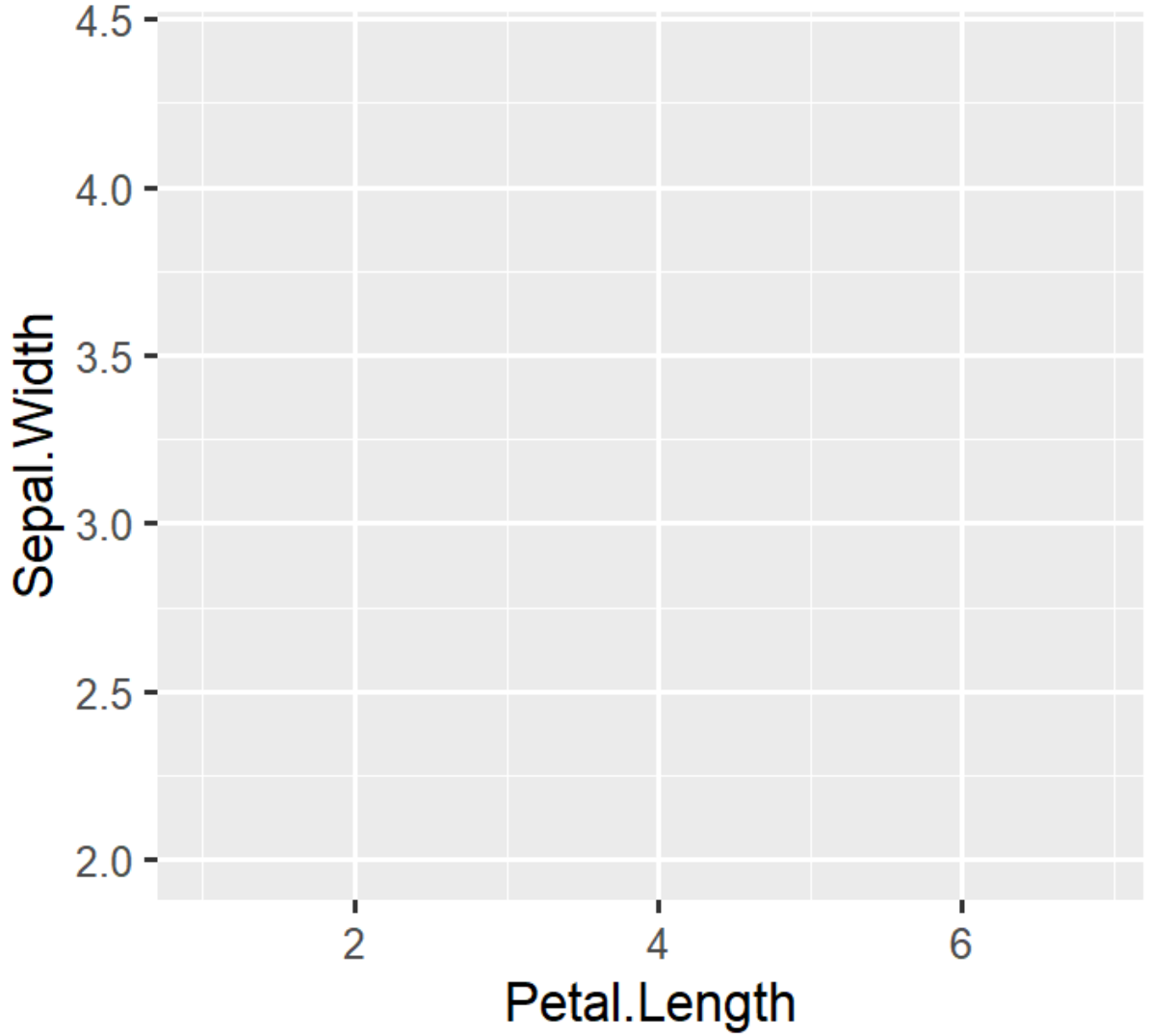
Edgar Anderson's Iris Data

- This famous (Fisher's or Anderson's) iris data set gives the measurements in centimeters of the variables sepal length and width and petal length and width, respectively, for 50 flowers from each of 3 species of iris. The species are Iris setosa, versicolor, and virginica.



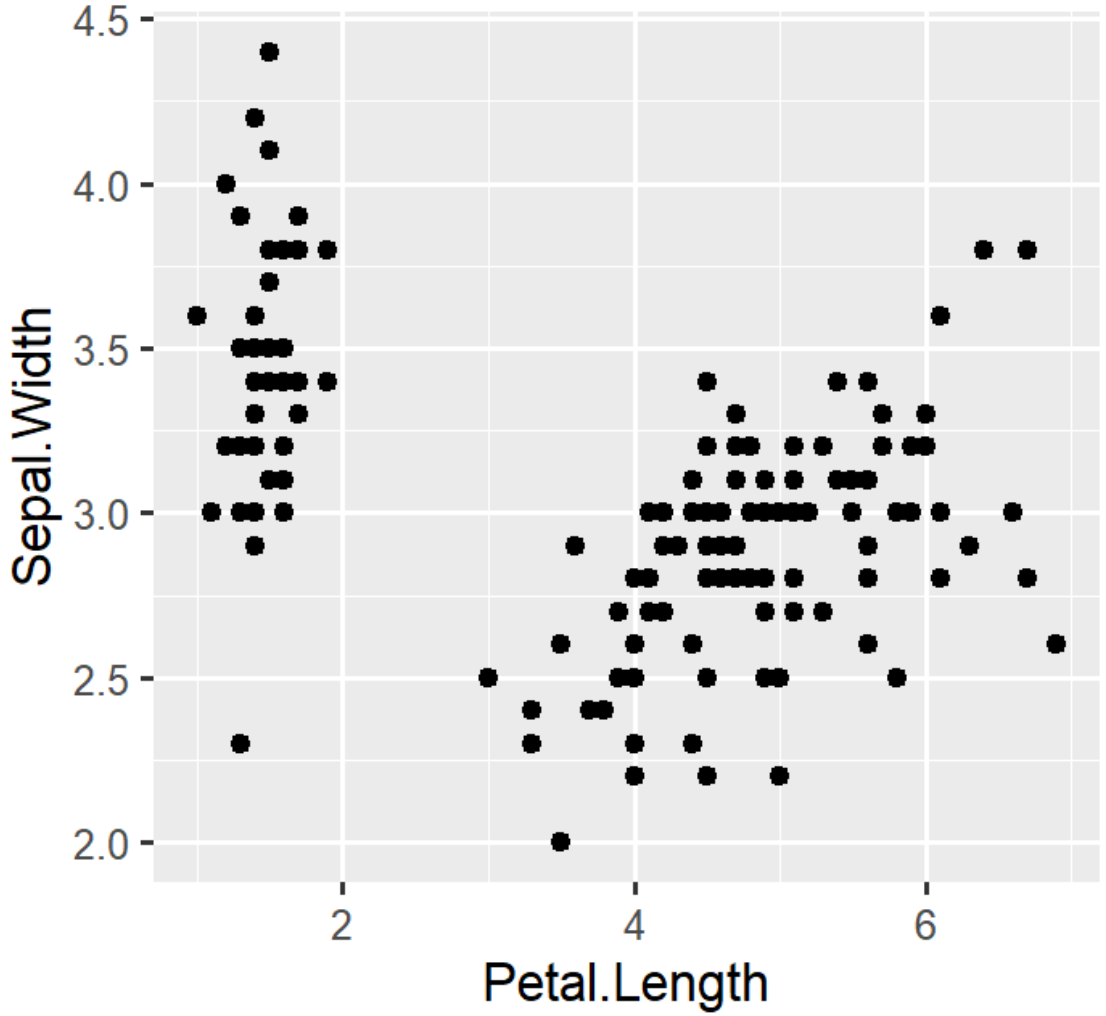
data, aesthetics

ggplot(iris, aes(x = Petal.Length, y = Sepal.Width))



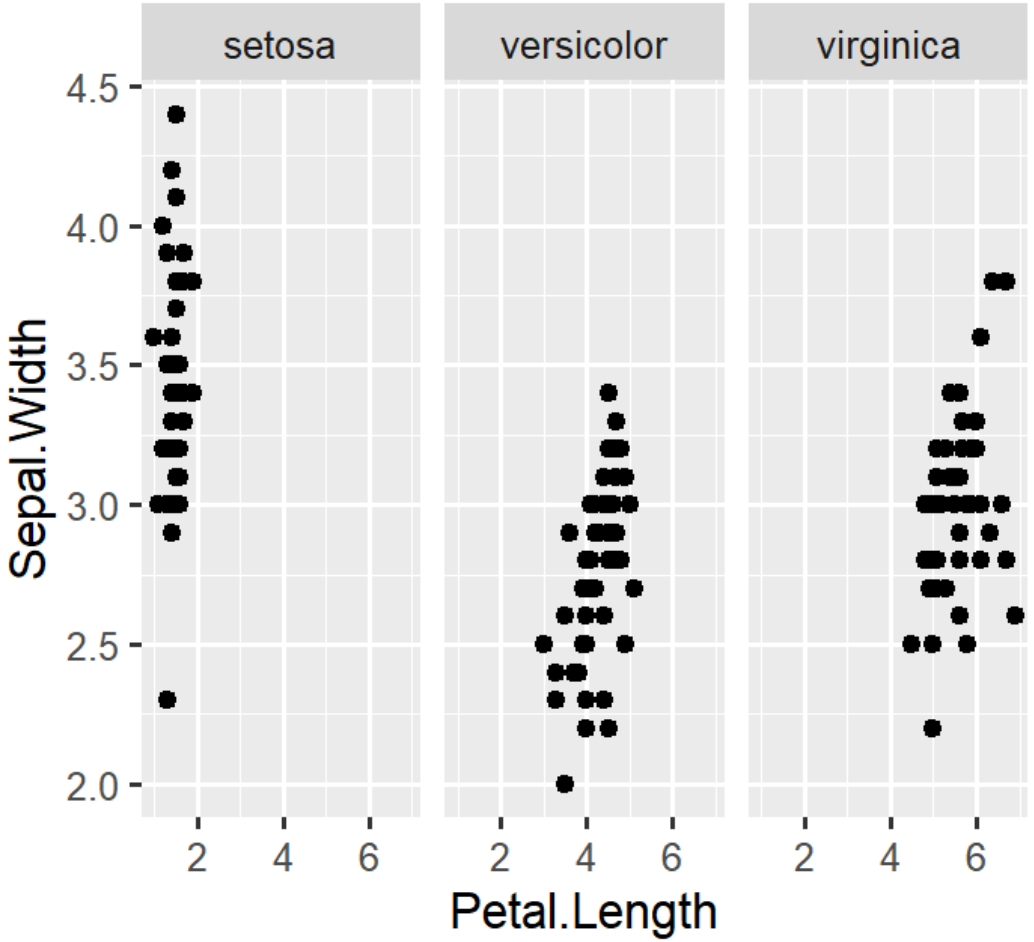
data, aesthetics, geometric

ggplot(iris, aes(x = Petal.Length, y = Sepal.Width)) + geom_point()



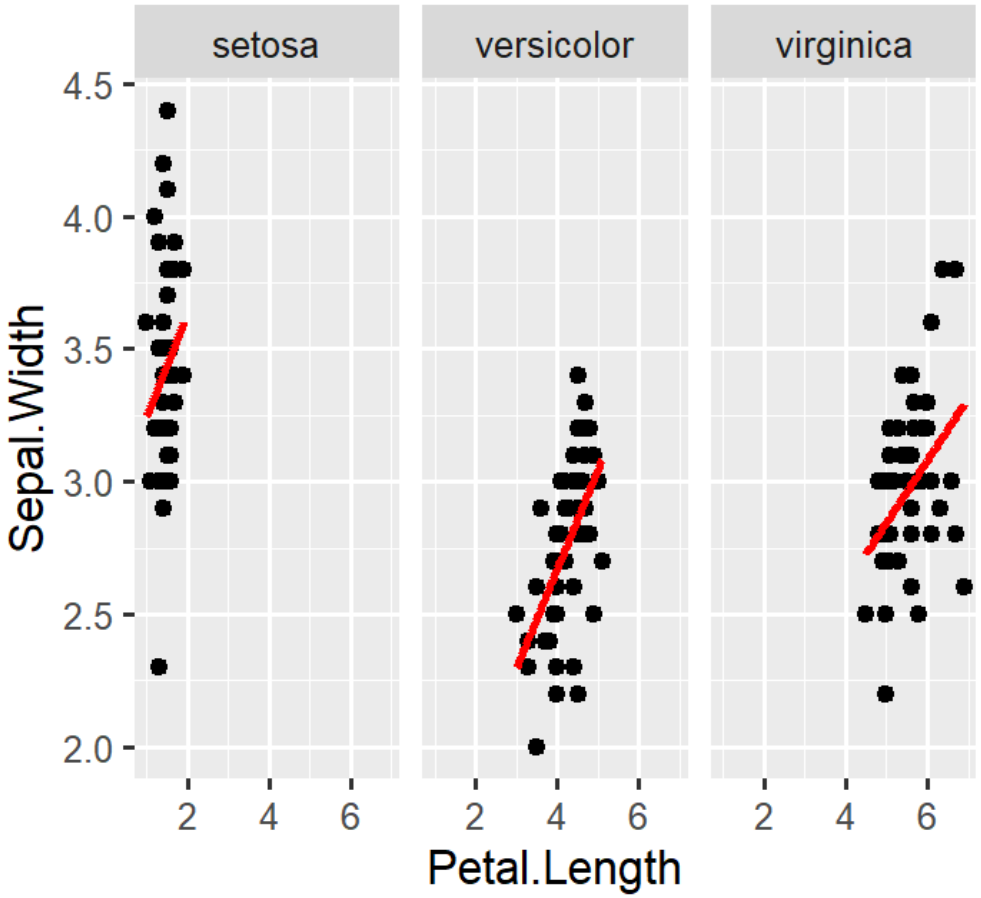
data, aesthetics, geometric, facets

ggplot(iris, aes(x = Petal.Length, y = Sepal.Width)) + geom_point() + facet_wrap(~Species)



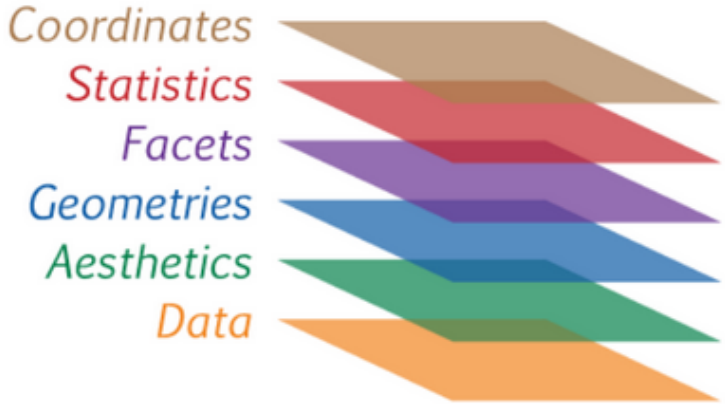
data, aesthetics, geometric, facets, statistics

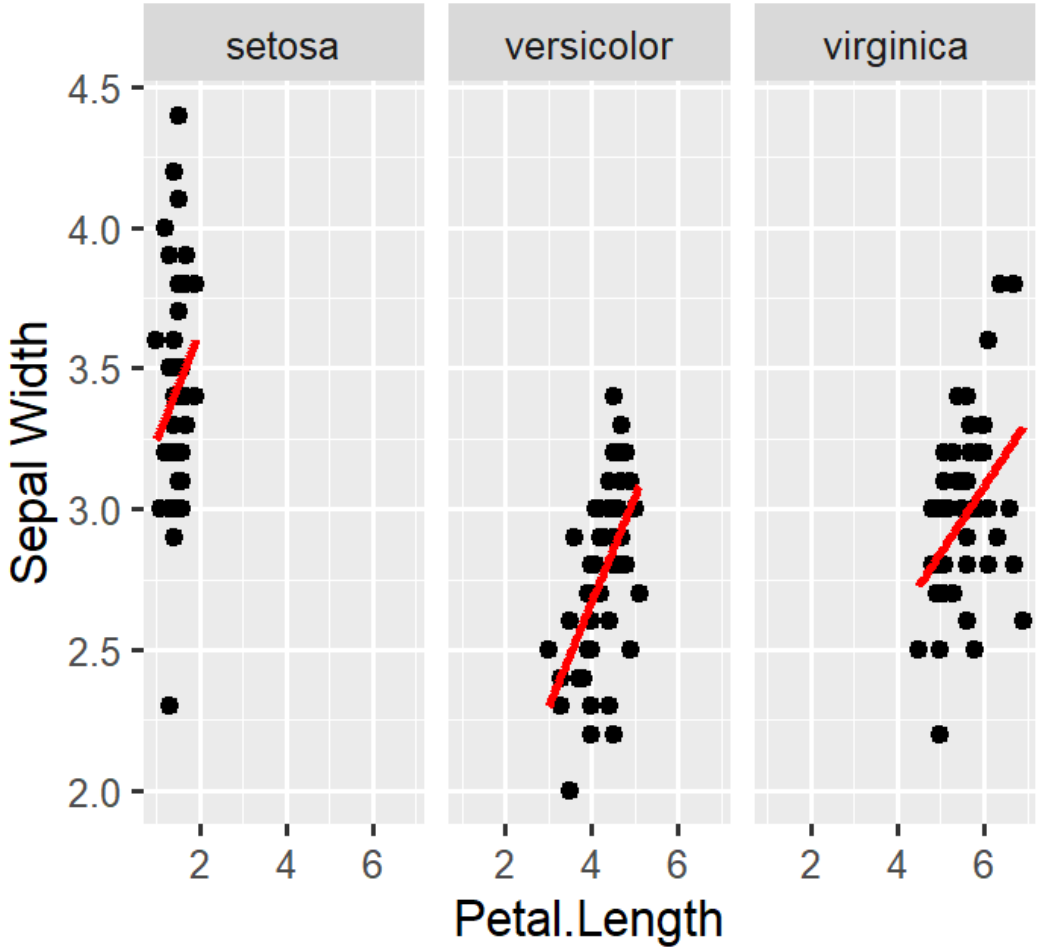
```
ggplot(iris, aes(x = Petal.Length, y =
Sepal.Width)) +  geom_point() +
facet_wrap(~Species) +
geom_smooth(method = "lm", se = F, col
= "red")
```



data, aesthetics, geometric, facets, statistics,...

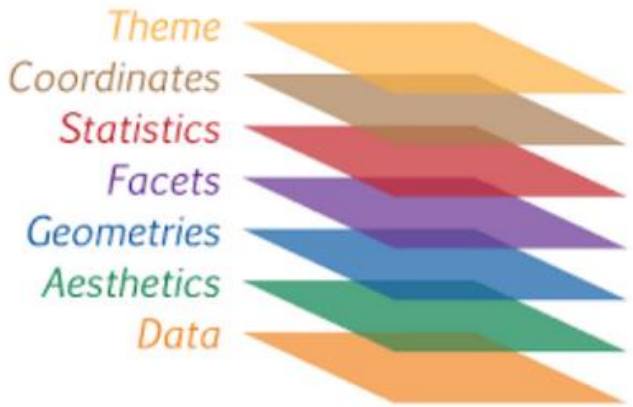
```
ggplot(iris, aes(x = Petal.Length, y =
Sepal.Width)) +  geom_point() +
facet_wrap(~Species) +
geom_smooth(method = "lm", se = F,
col = "red") +
scale_y_continuous("Sepal Width",
breaks = seq(0,5, 0.5))
```

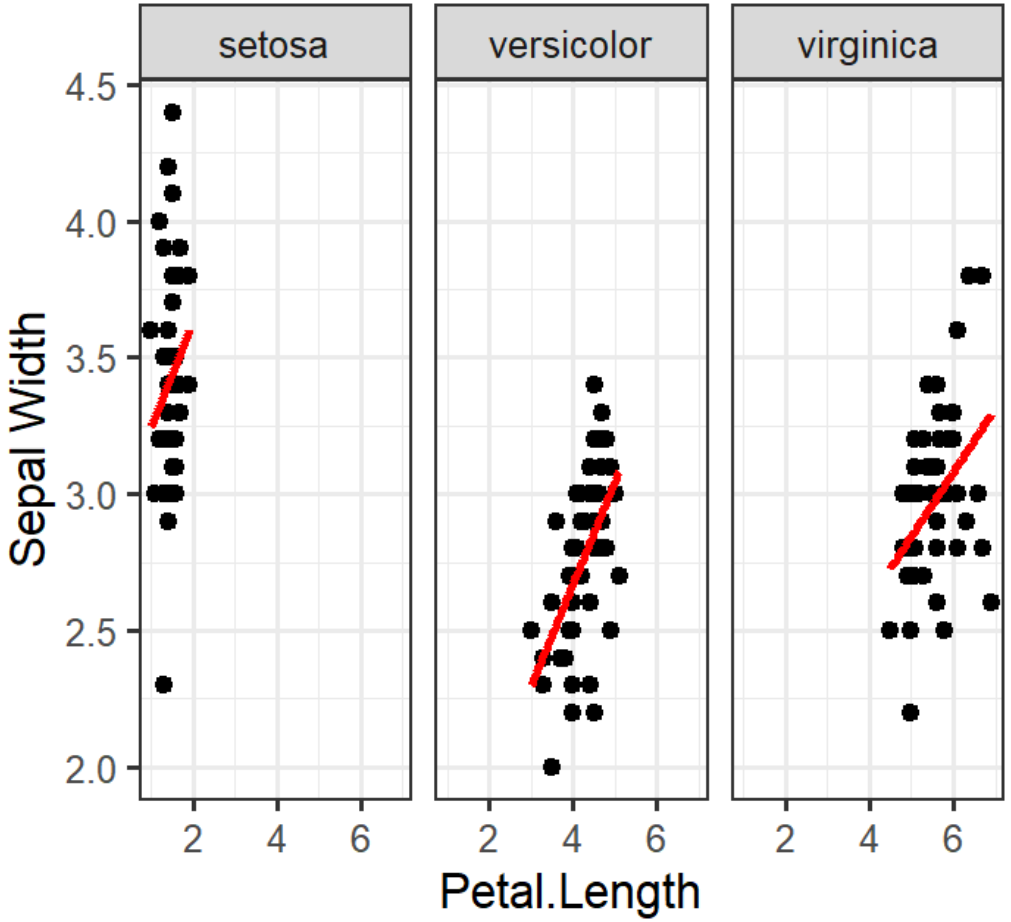




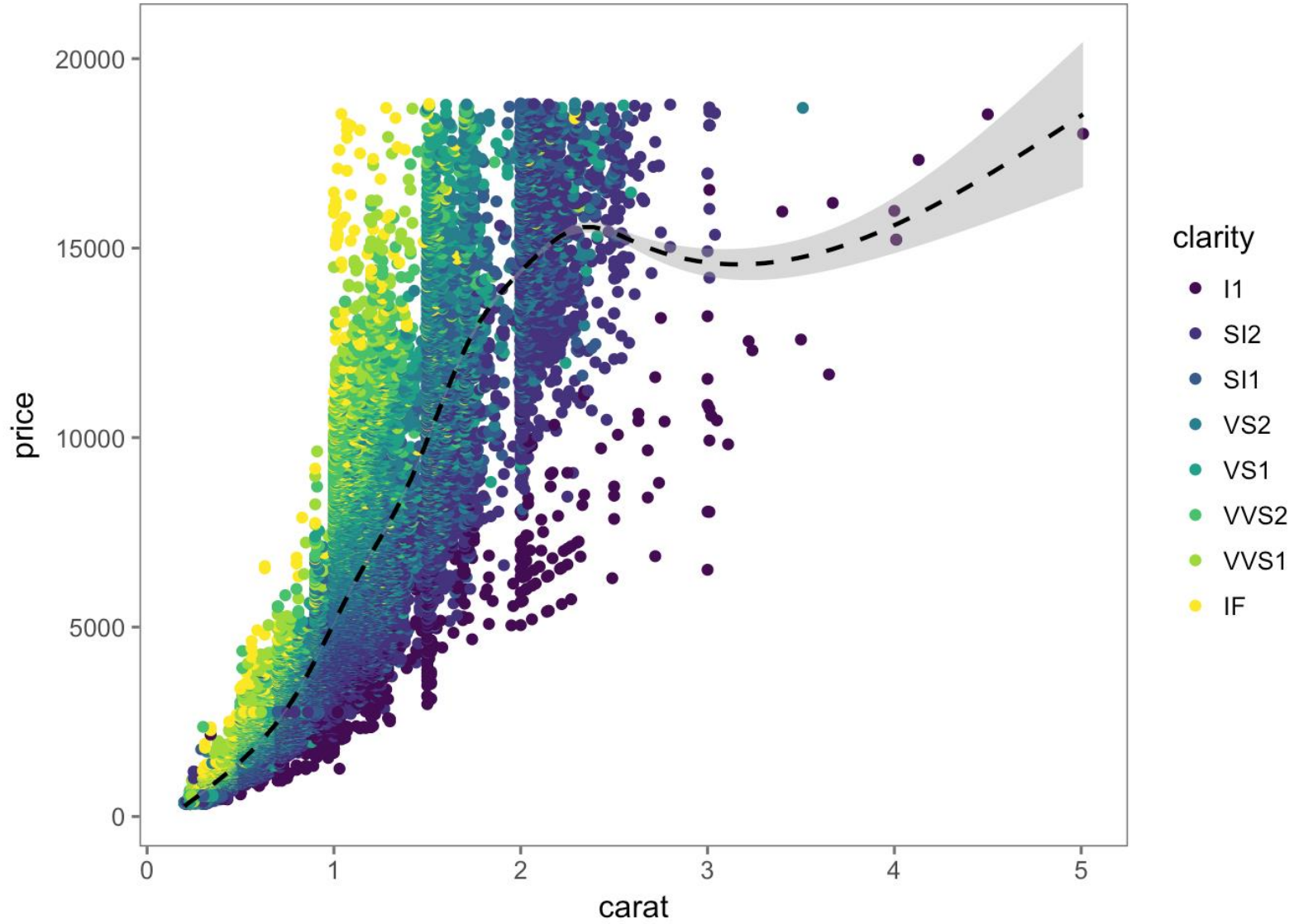
data, aesthetics, geometric, facets, statistics,…theme

- ggplot(iris, aes(x = Petal.Length, y = Sepal.Width)) + geom_point() + facet_wrap(~Species) + geom_smooth(method = "lm", se = F, col = "red") + scale_y_continuous("Sepal Width", breaks = seq(0,5, 0.5)) + theme_bw()





Gracias


20000
15000
10000
5000
0
price
0
1
2
3
4
5
carat
clarity
I1
SI2
SI1
VS2
VS1
VVS2
VVS1
IF