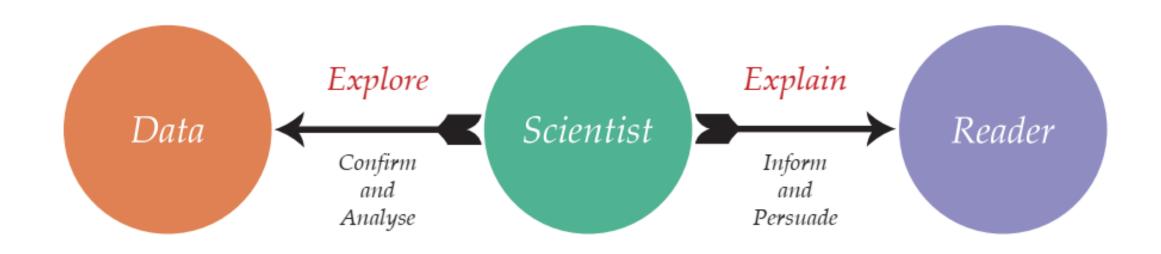


# Data Visualization II

Universitas Airlangga, 4 September 2018

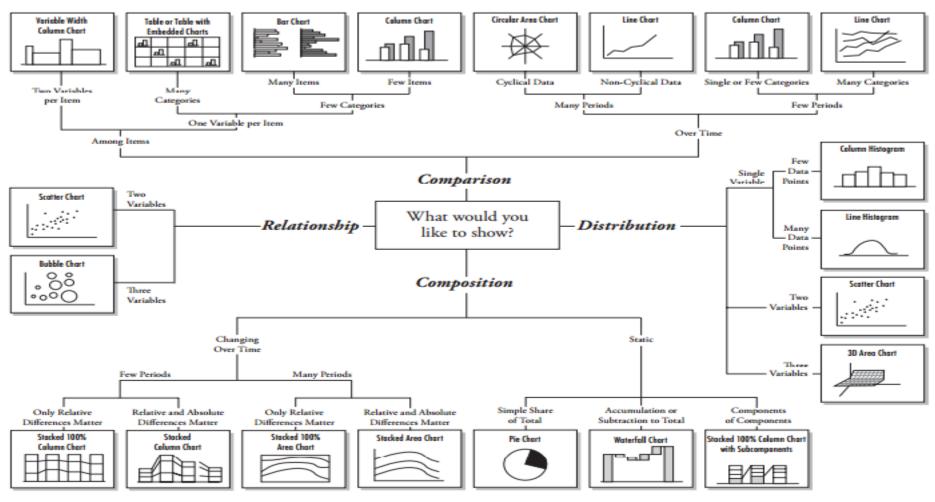
Achmad Wildan Al Aziz







#### Chart Suggestions—A Thought-Starter

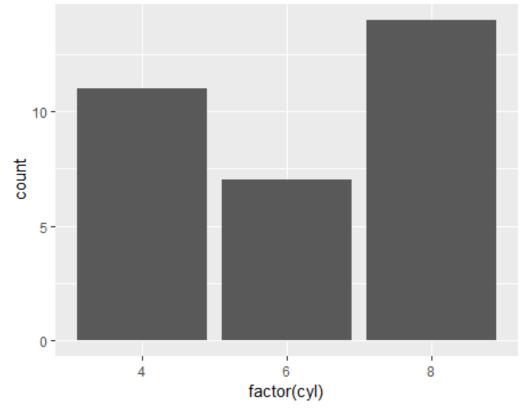


## **Bar Plot**



> ggplot(mtcars, aes(factor(cyl))) +

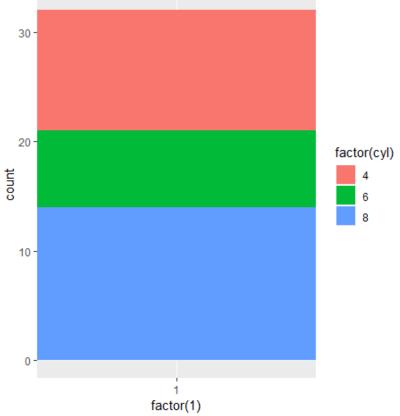
geom bar()



#### Stacked bar chart



> ggplot(mtcars, aes(x = factor(1), fill = factor(cyl))) +
geom bar(width = 1)



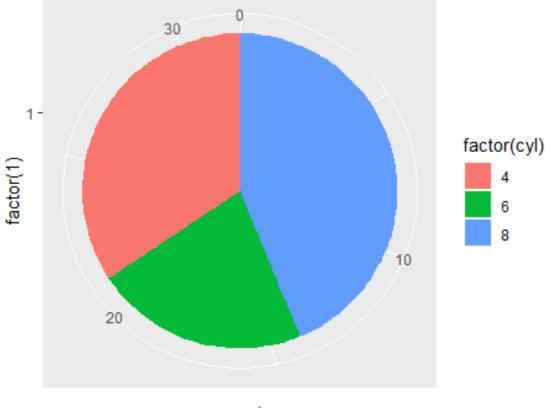
#### Pie Chart



> ggplot(mtcars, aes(x = factor(1), fill = factor(cyl))) +

geom\_bar(width = 1) +

coord\_polar(theta = "y")

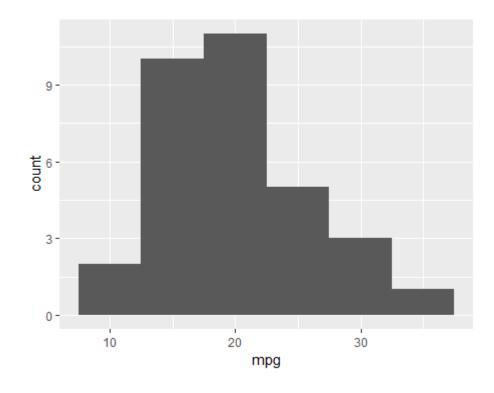


count

## Histogram



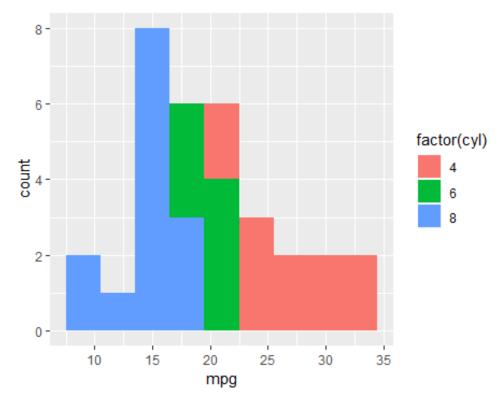
> ggplot(mtcars, aes(x = mpg)) +
geom histogram(binwidth =5)



## Histogram II



> ggplot(mtcars, aes (x = mpg, fill= factor(cyl))) + geom histogram(binwidth = 3)

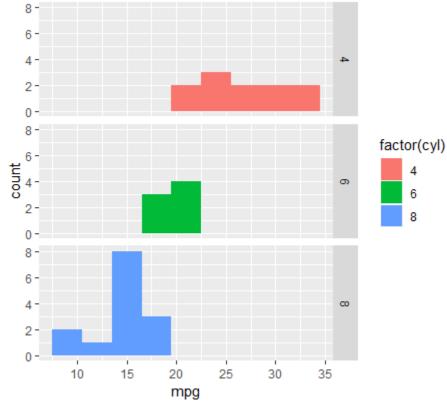


### Histogram III



> ggplot(mtcars, aes (x = mpg, fill= factor(cyl))) + geom histogram(binwidth = 3) +  $\frac{1}{8}$ 

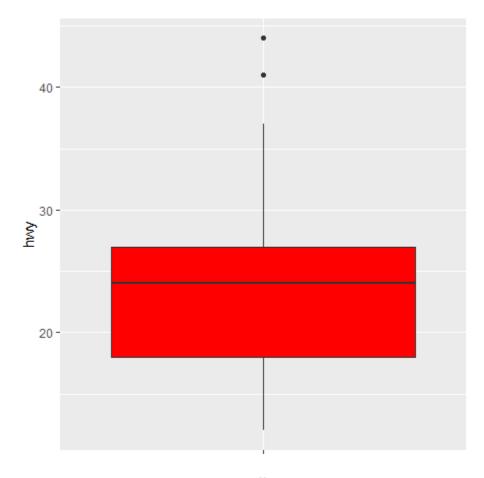
facet\_grid(factor(cyl) ~ .)



### **Box Plot**



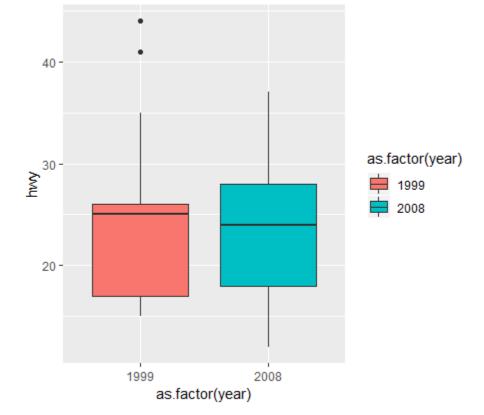
> ggplot(mpg, aes(x="", y=hwy)) +
 geom boxplot(fill="red")



### **Box Plot II**



> ggplot(mpg, aes(x=as.factor(year), y=hwy, fill=as.factor(year))) +
 geom\_boxplot()



## Let's Get Your Hands Dirty



Data = txhousing

Information about the housing market in Texas

#### A data frame with 8602 observations and 9 variables:

city <sup>‡</sup>	year ‡	month <sup>‡</sup>	sales <sup>‡</sup>	volume <sup>‡</sup>	median ‡	listings †	inventory <sup>‡</sup>	date ‡
Abilene	2000	1	72	5380000	71400	701	6.3	2000.000
Abilene	2000	2	98	6505000	58700	746	6.6	2000.083
Abilene	2000	3	130	9285000	58100	784	6.8	2000.167
Abilene	2000	4	98	9730000	68600	785	6.9	2000.250
Abilene	2000	5	141	10590000	67300	794	6.8	2000.333