



# Techniki Wizualizacji Danych

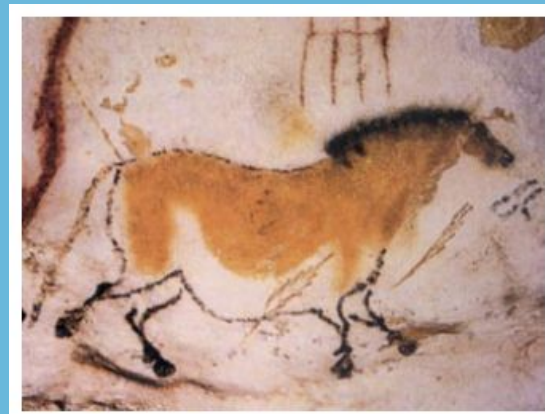
Politechnika Warszawska

Anna Kozak



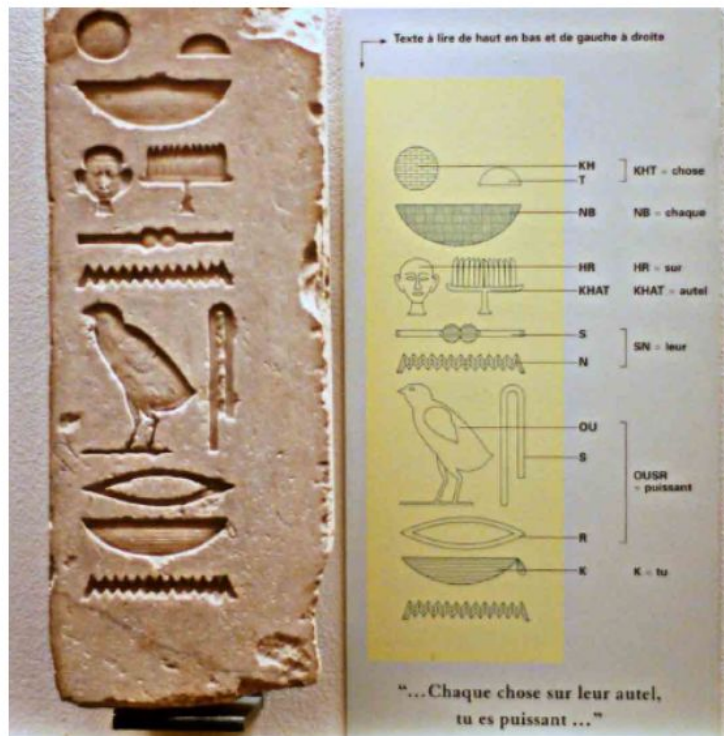
# Historia grafiki statystycznej

# Zaczniemy bardzo daleko...



## ... 17 tysięcy lat temu.

# Hieroglify



Tekst należy czytać  
od lewej do prawej,  
z góry na dół.

= rzecz

= wszystkie

= ołtarz

= ich

= potężny

= ty

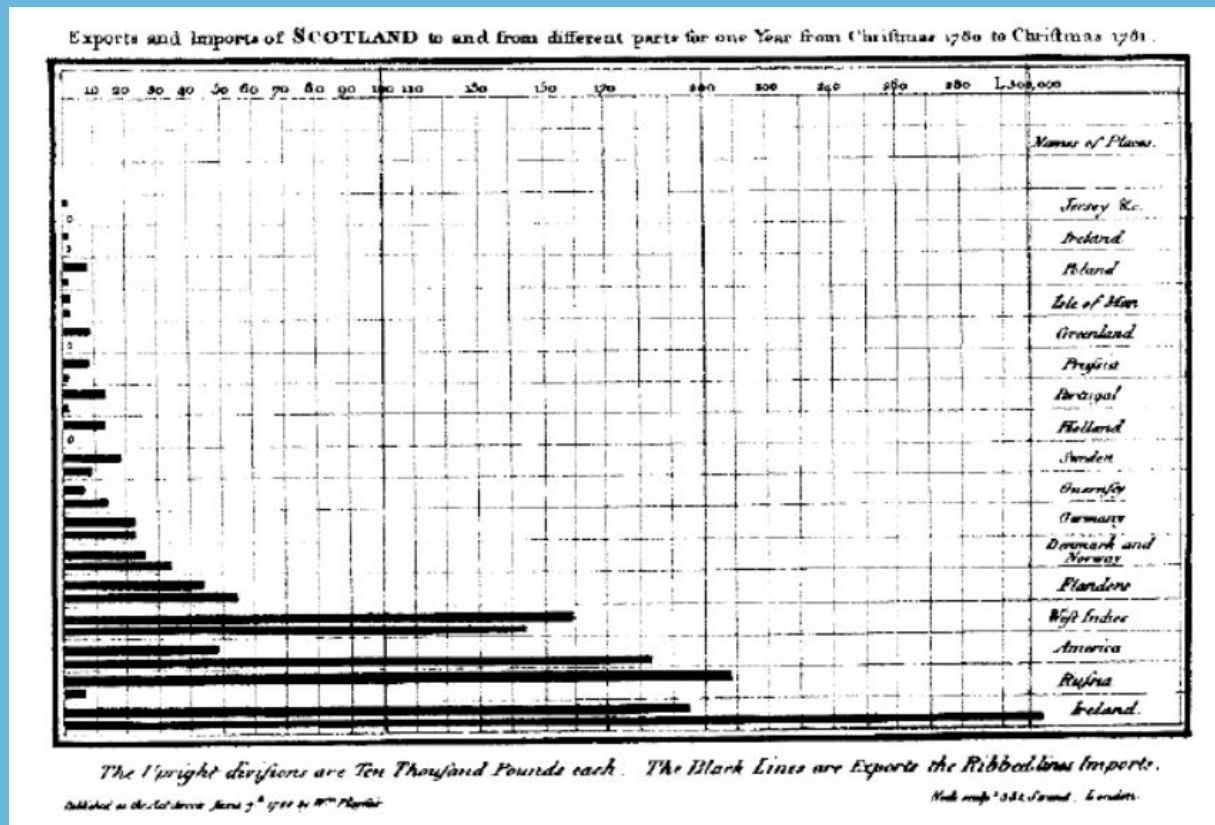
= Wszystko na ich ołtarz,  
jesteś potężny

*A Specimen of a Chart of Biography.*

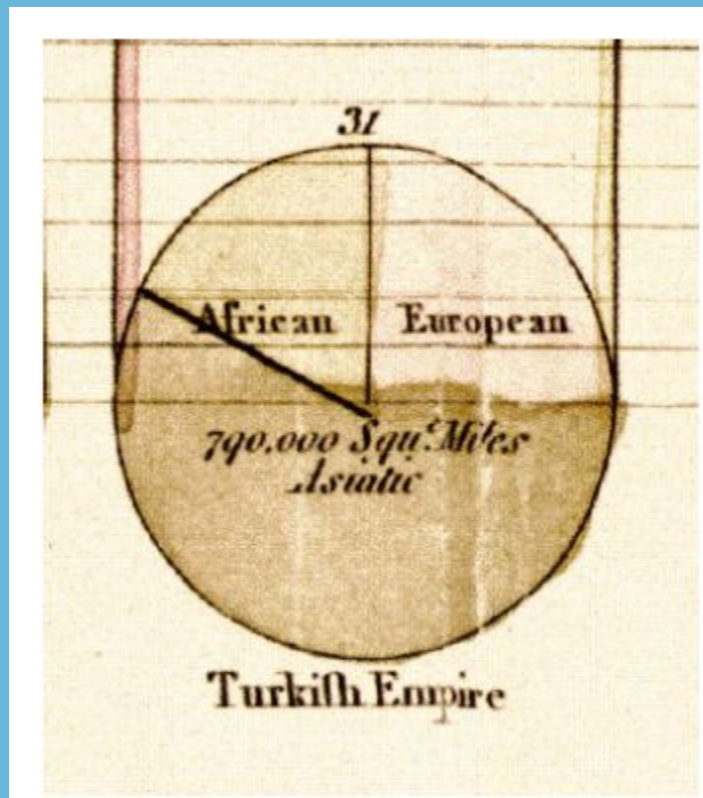




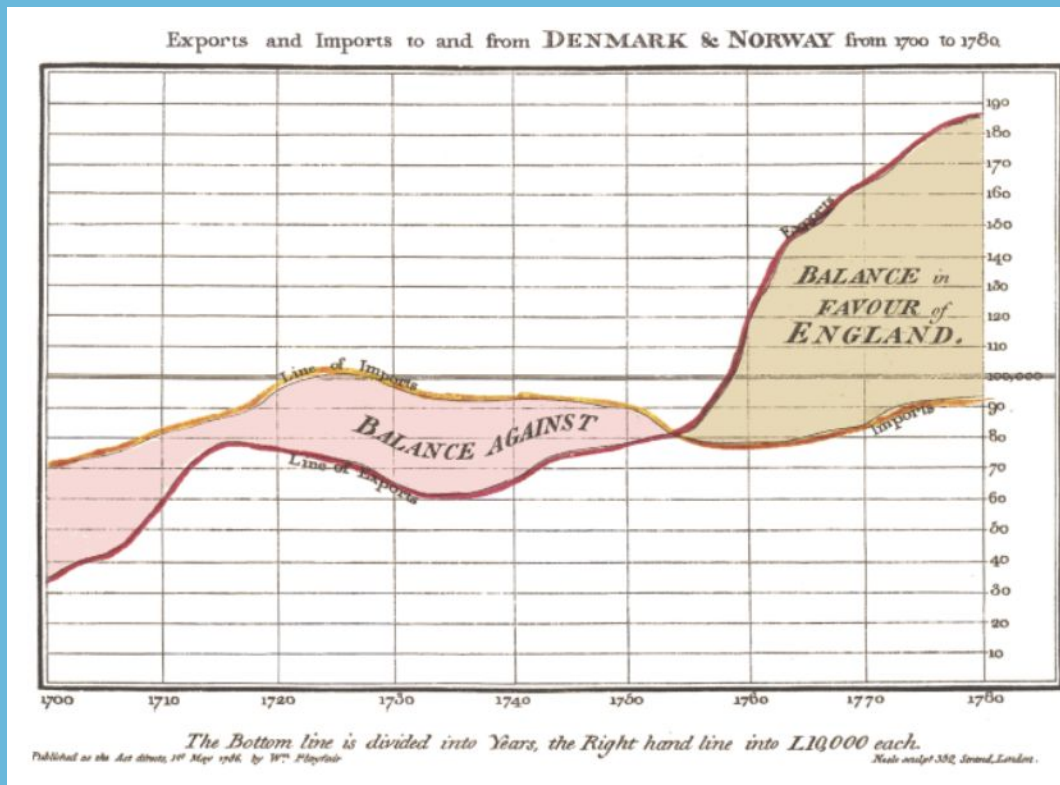
# William Playfair



# William Playfair

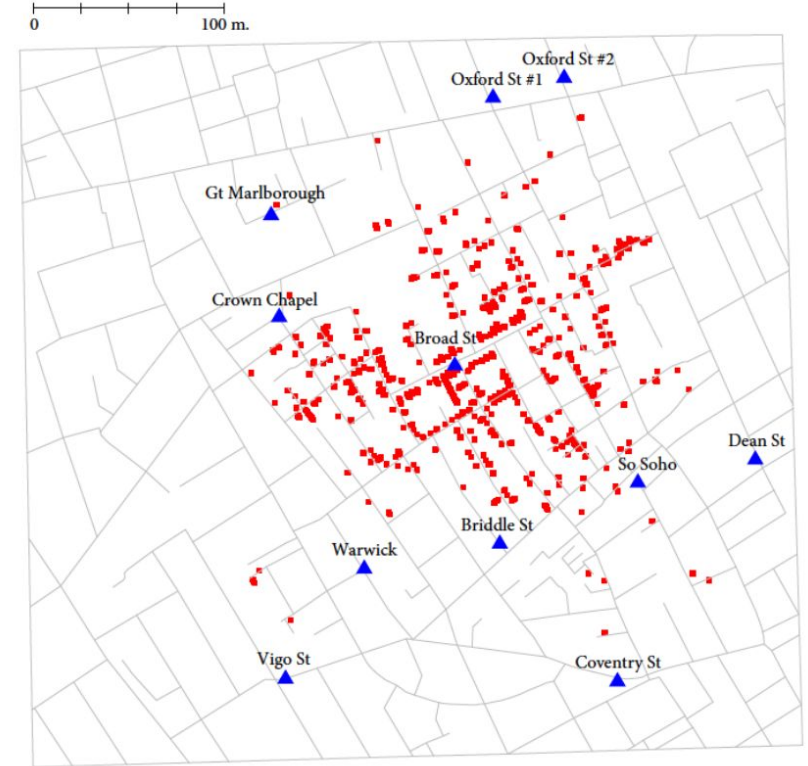
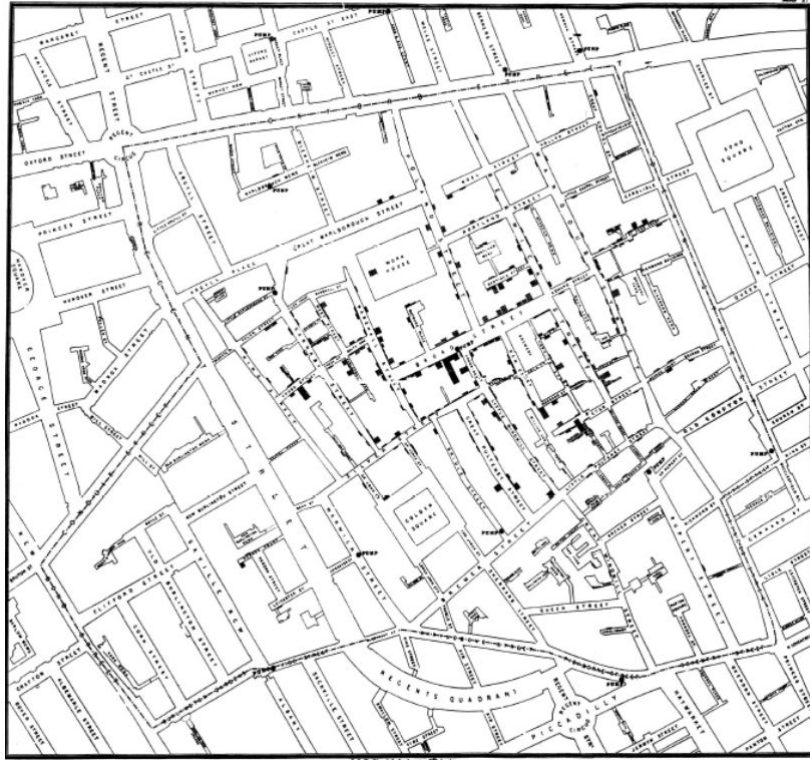


# William Playfair

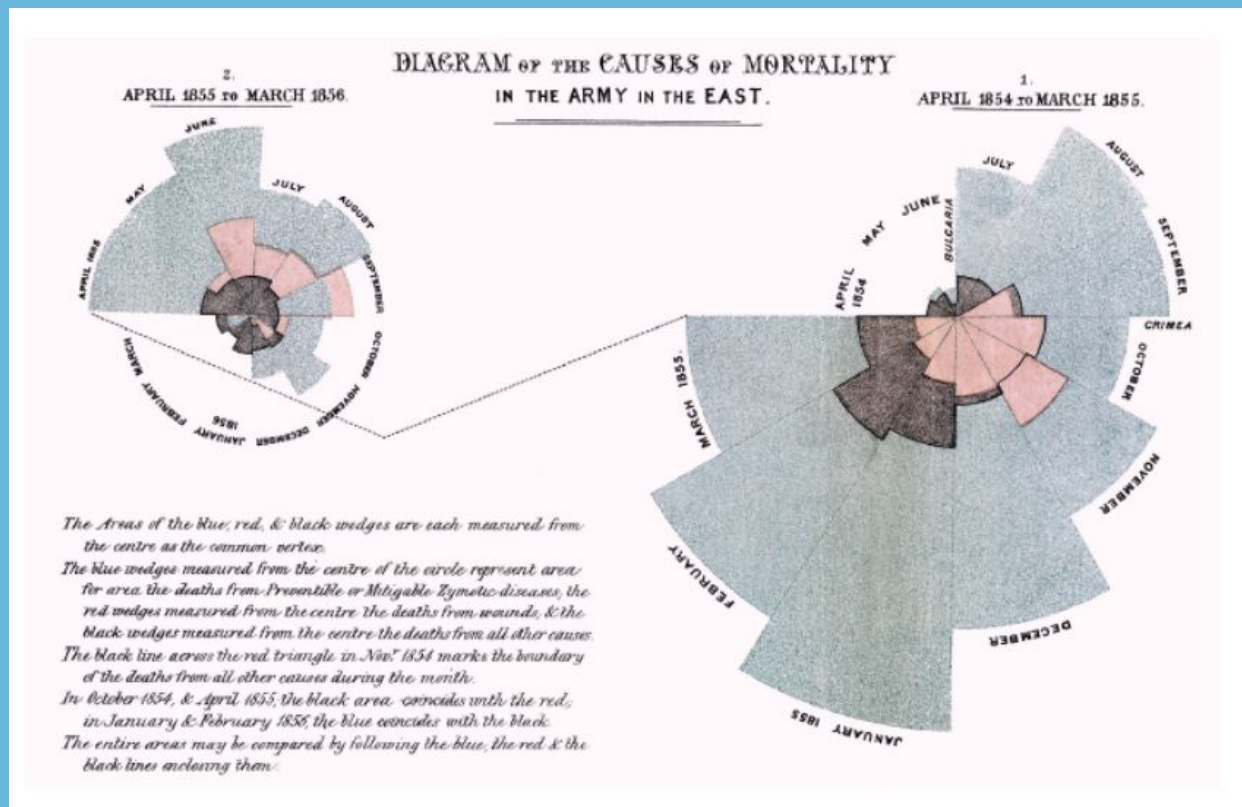




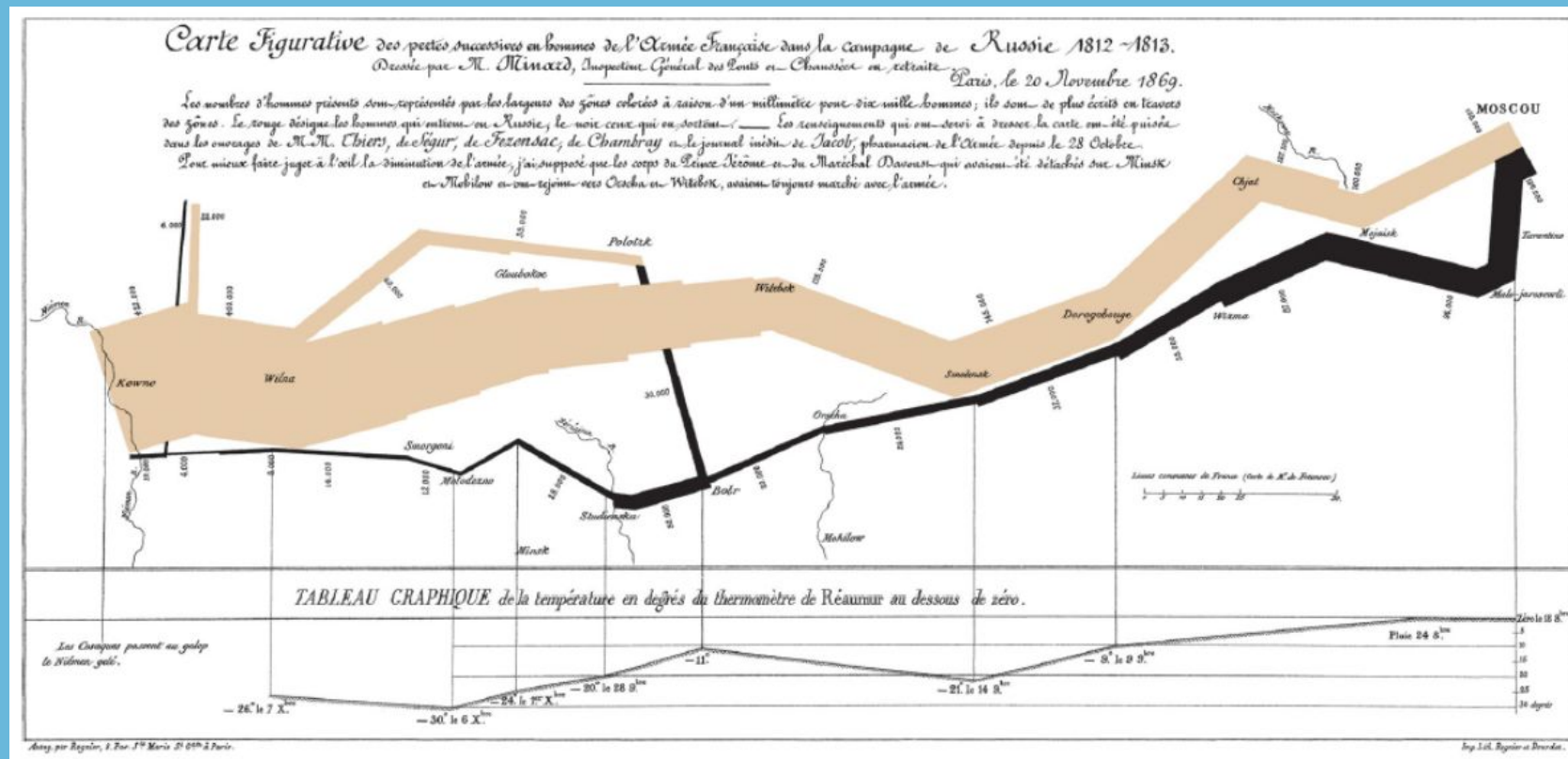
# John Snow



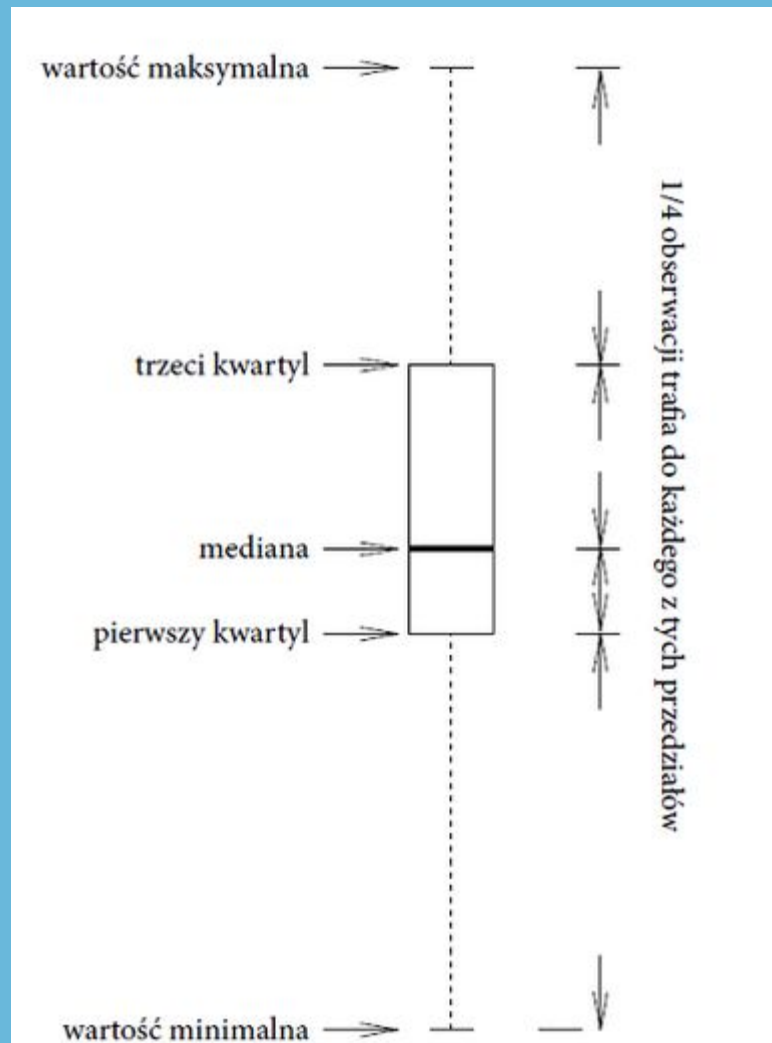
# Florence Nightingale

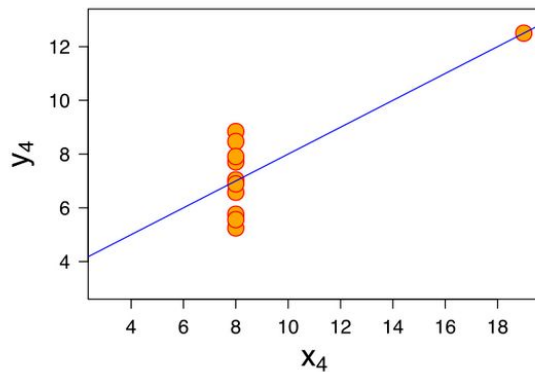
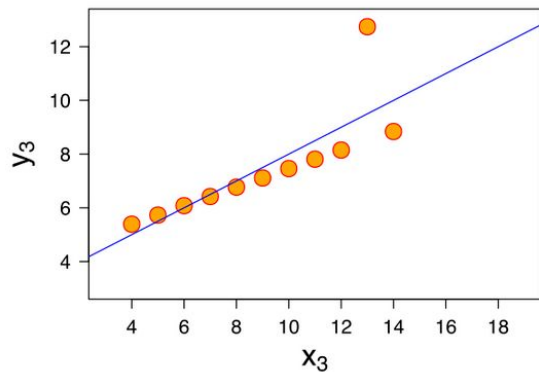
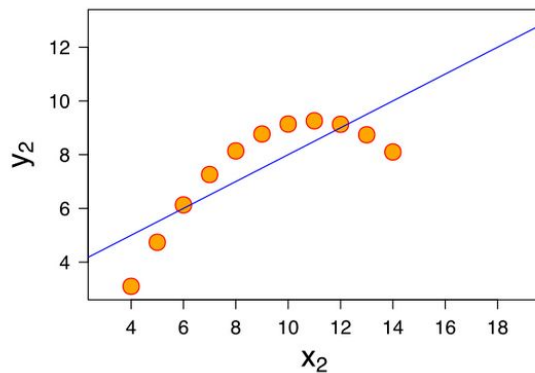
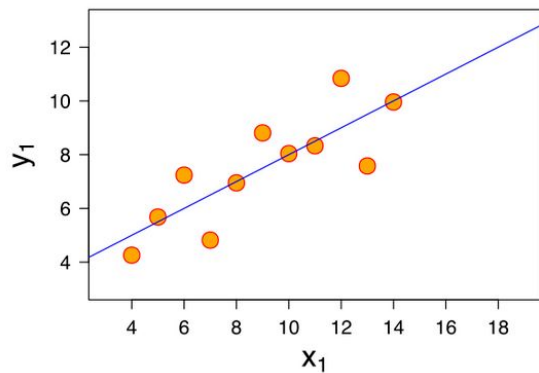


# Charles Minard



# John Tukey





# Kwartet Anscombe'a



# Edward Tufte

[www.edwardtufte.com](http://www.edwardtufte.com)

