

# Techniki Wizualizacji Danych



Politechnika Warszawska

Anna Kozak

# Historia grafiki statystycznej

#### Zacznijmy bardzo daleko...

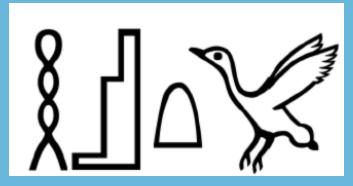


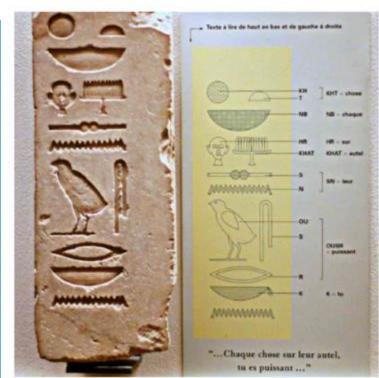




... 17 tysięcy lat temu.

## Hieroglify

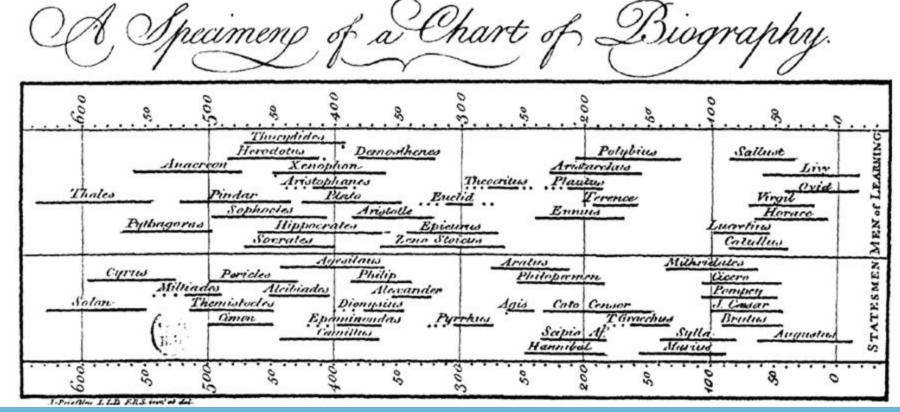




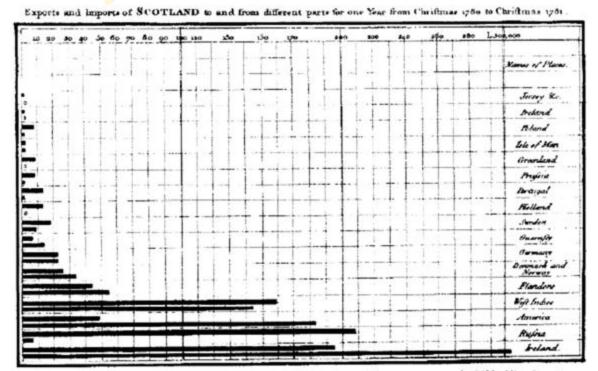
Tekst należy czytać od lewej do prawej, z góry na dół.

- = rzecz
- = wszystkie
- = oltarz
- = ich
- = potężny
- = ty
- Wszystko na ich ołtarz, jesteś potężny

Joseph Priestley

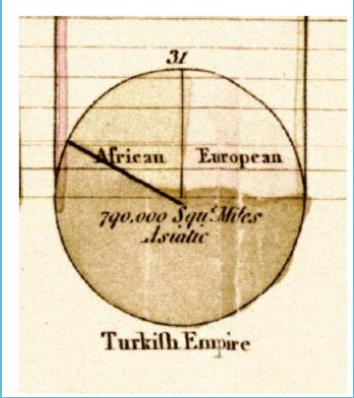


# William Playfair

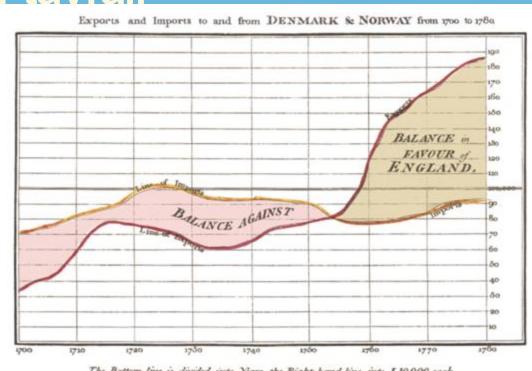


The I pright directions are Ten Thougard Pounds each. The Black Lines are Experts the Ribbedlines Imports.

William Playfair



#### William Playfair

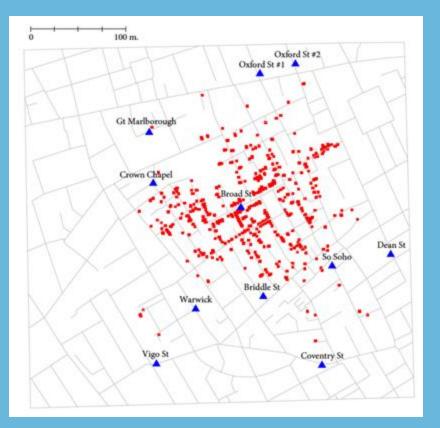


The Bottom line is divided into Years, the Right hand line into L10000 each.

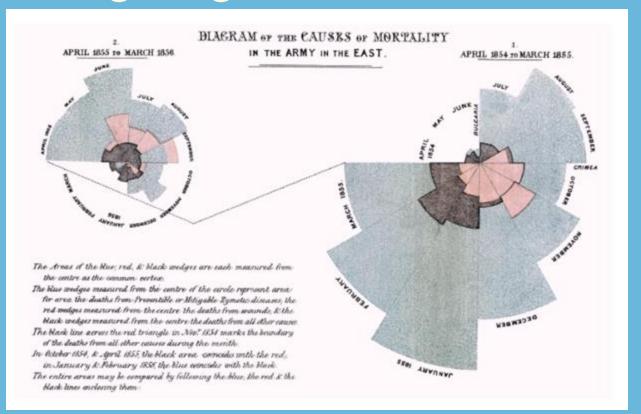
Note and the state of the order of the order of the state of the state

# John Snow

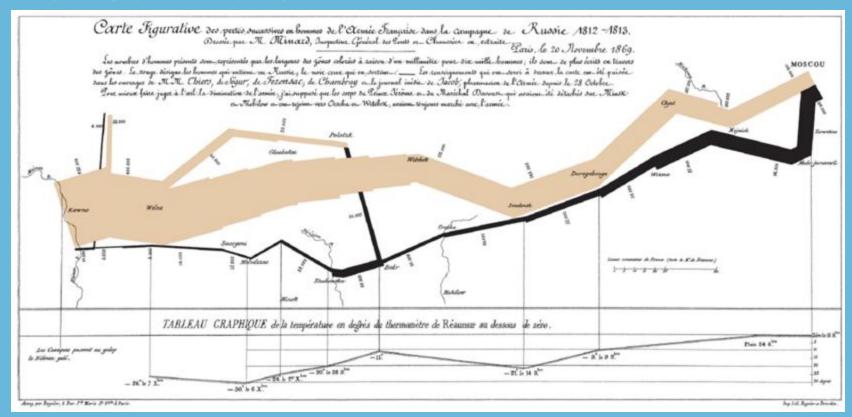




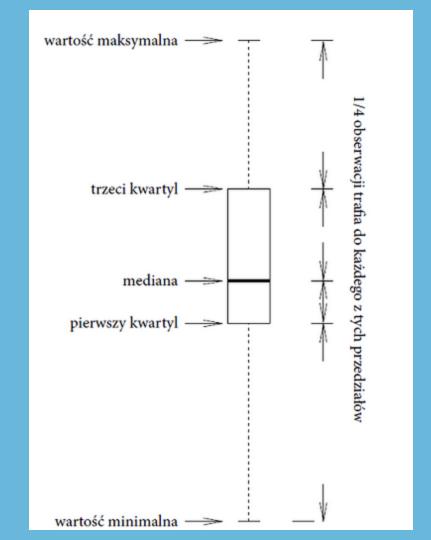
# Florence Nightingale

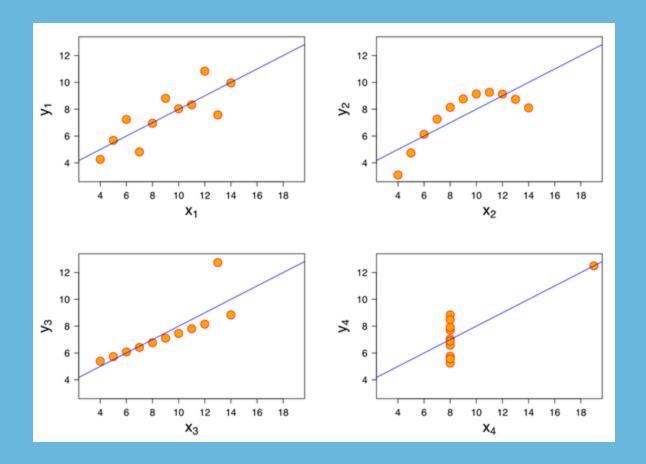


#### **Charles Minard**



# John Tukey





## Kwartet Anscombe'a

### **Edward Tufte**

www.edwardtufte.com

