

# A History of Statistical Graphics & Critiquing Statistical Graphics

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36-315

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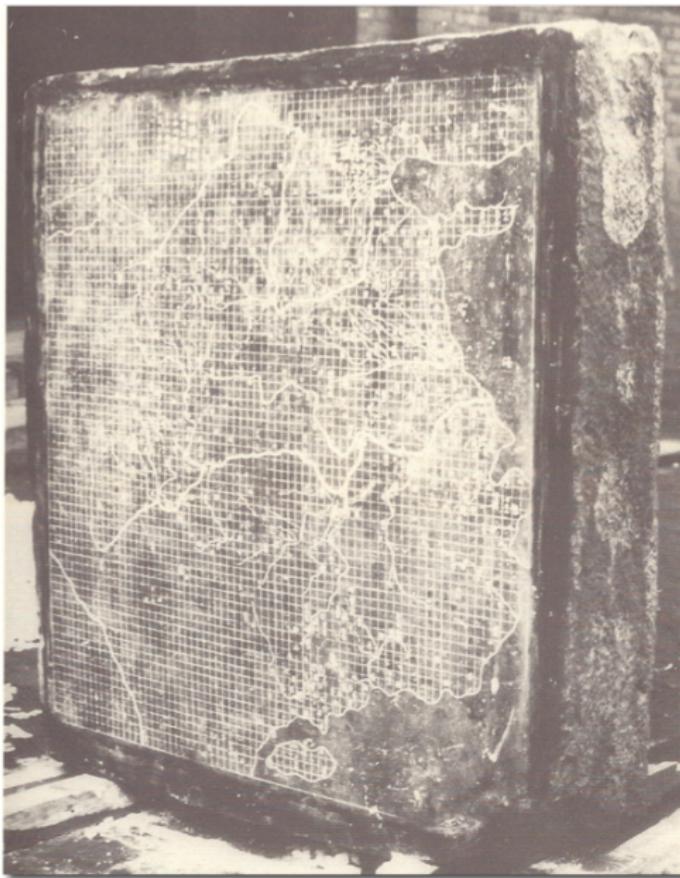
January 18, 2017

## Earliest Graphics

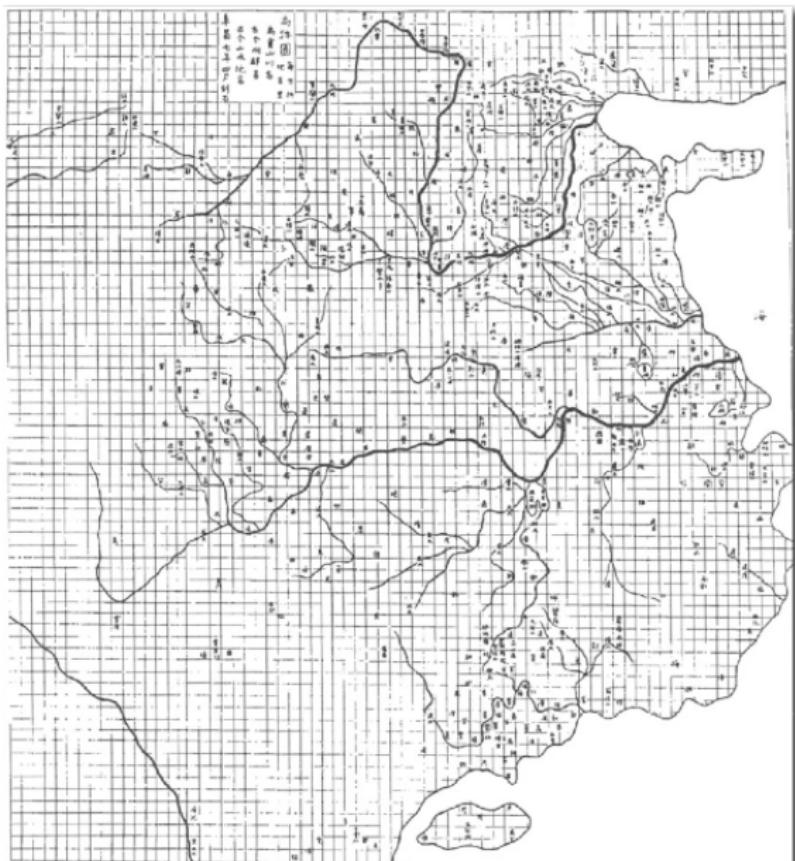
Began with geographic maps:  
symbols/colors on clay tablets (5000 years ago)

11th century China: Map of the Tracks of Yu The Great  
coastal outline very accurate  
high precision of rivers  
scale is almost exact  
carved into 3-ft wide stone tablet

# Map of the Tracks of Yu The Great

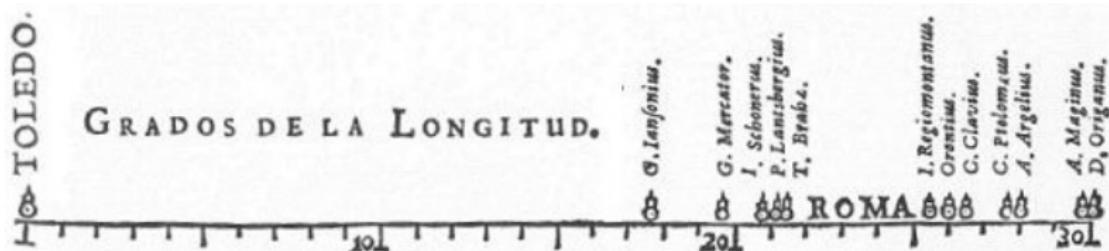


# Map of the Tracks of Yu The Great



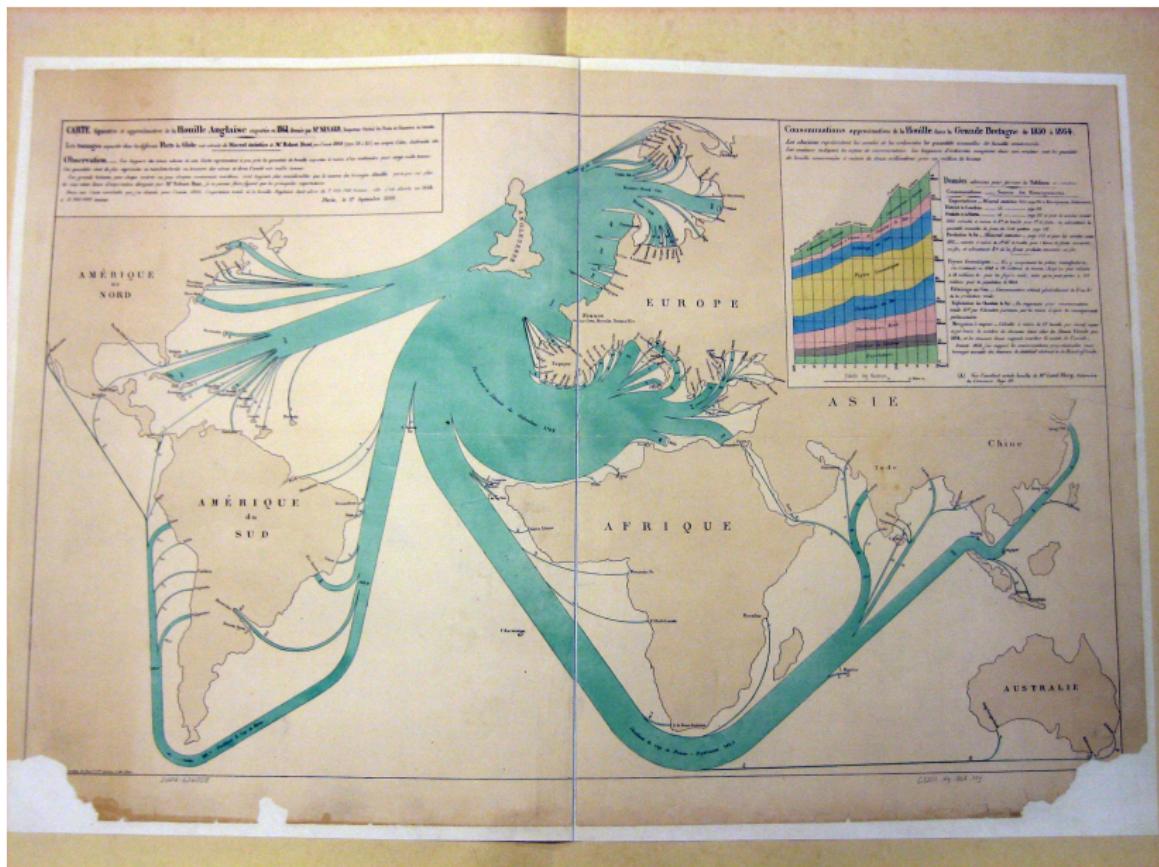
# La Verdadera Longitud por Mar y Toledo

Shows statistical information!



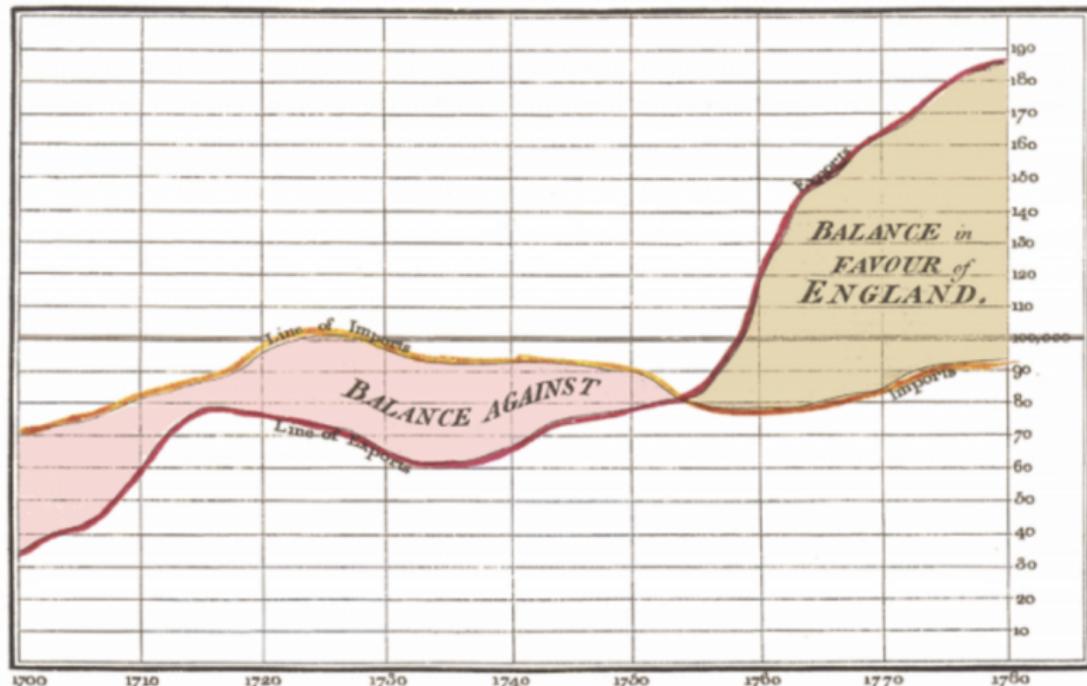
Wide range of estimates of distance from Rome to Toledo

## Minard – Exports of French Wine



# England's Imports and Exports

Exports and Imports to and from DENMARK & NORWAY from 1700 to 1780.

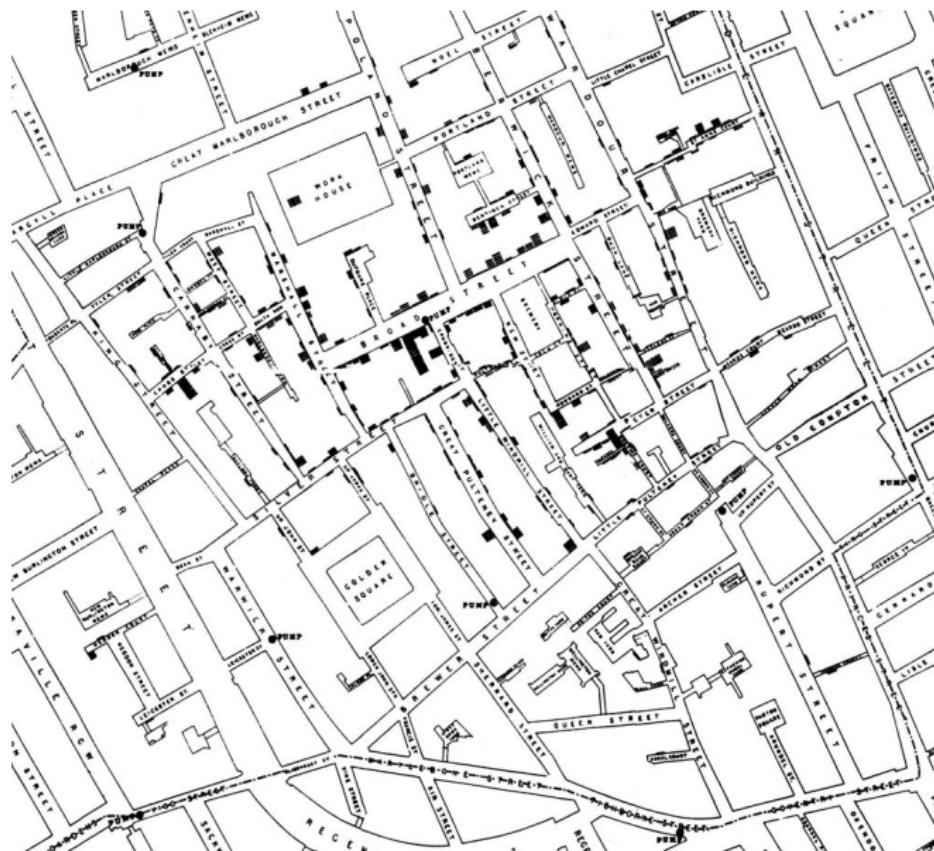


The Bottom line is divided into Years, the Right hand line into £10,000 each.

Published at the Art Studio, 1<sup>st</sup> May 1806, by W<sup>m</sup> Playfair.

No. one and 3/4, Strand, London.

# Cholera Mapping



Jon Snow



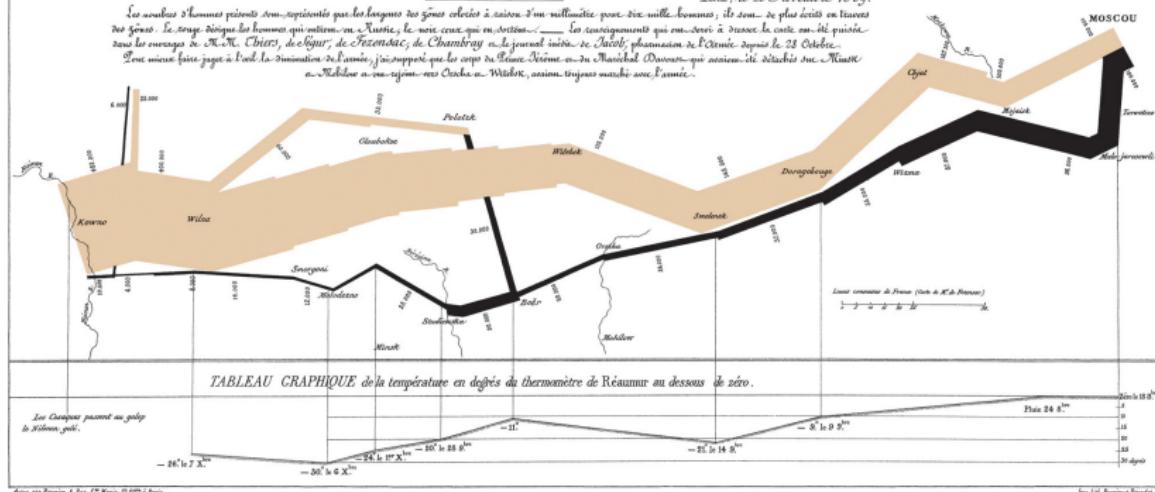
You know nothing (about cholera),  
**JOHN SNOW**

# Napoleonic's March To Moscow

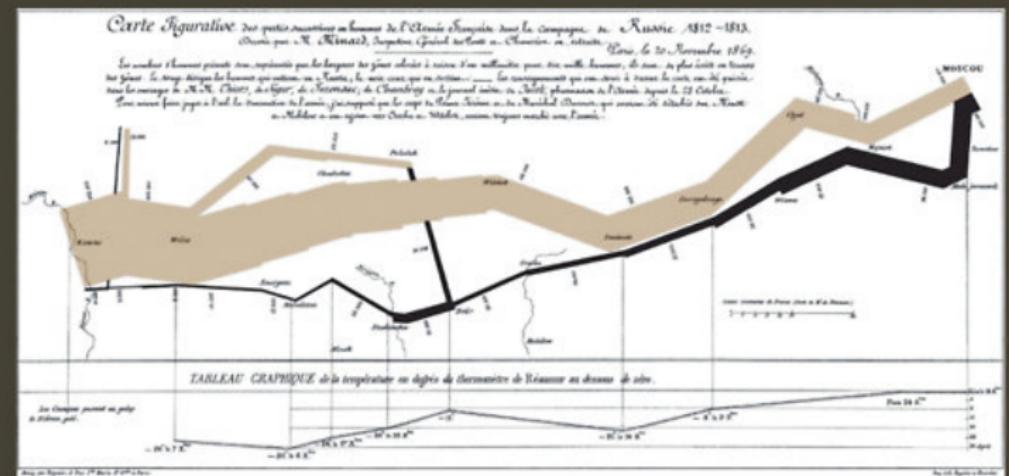
Carte Figurative des progrès successifs en bonnes de l'Armée Française dans la campagne de Russie 1812-1813.

Dessiné par M. Minard, Ingénieur Général des Ponts et Chaussées en détresse. Paris, le 20 Novembre 1869.

Les courbes d'hommes perdus... représentent que les longues des zones croisées à raison d'un millimètre pour six mille hommes; de sorte de plus écrit en traits des zones. Le rouge indique les hommes qui entrent en Russie, le noir ceux qui en sortent. — Les renouvellements qui ont lieu à desser la carte, on les puisse dans les messages de M. M. Chabot, de Legay, de Tocinet, de Chambry ou le journal intime de Napoléon, plusieurs de l'Armée depuis le 23 Octobre. Lors même faire jeter à l'oval la dimension de l'armée, j'ai supposé que les corps du Prince Napoléon ou du Maréchal Davout, qui avaient été détachés sur l'Amirauté ou l'Asie au début de l'armée, avaient été unis avec l'armée.



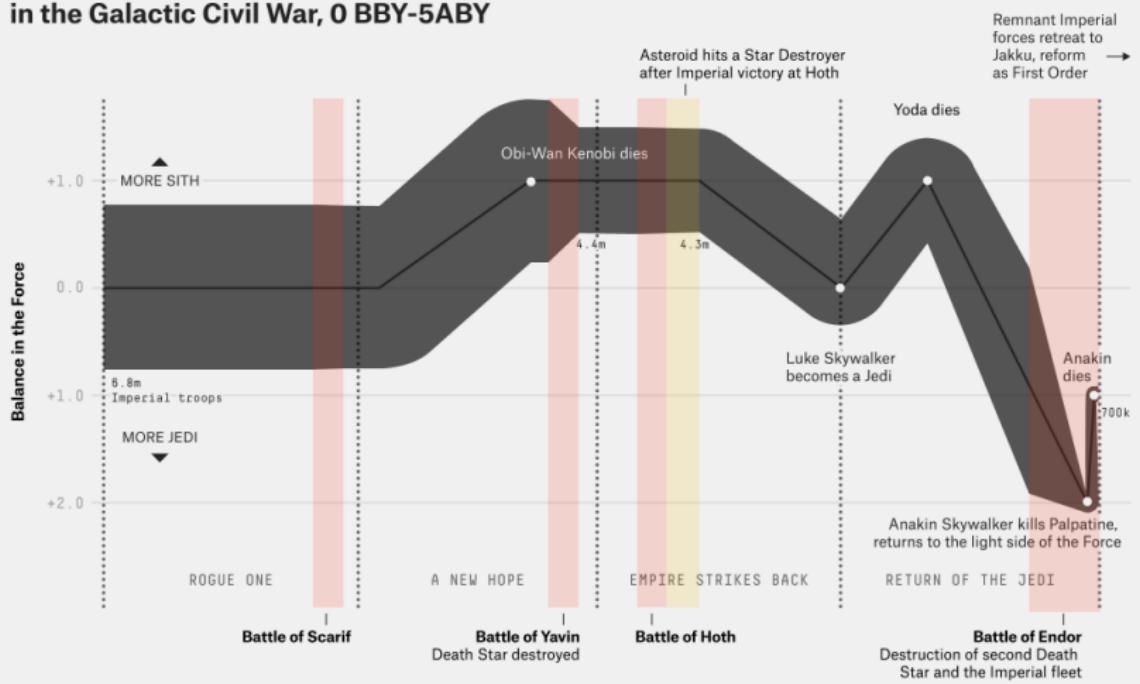
# Winter Is Coming



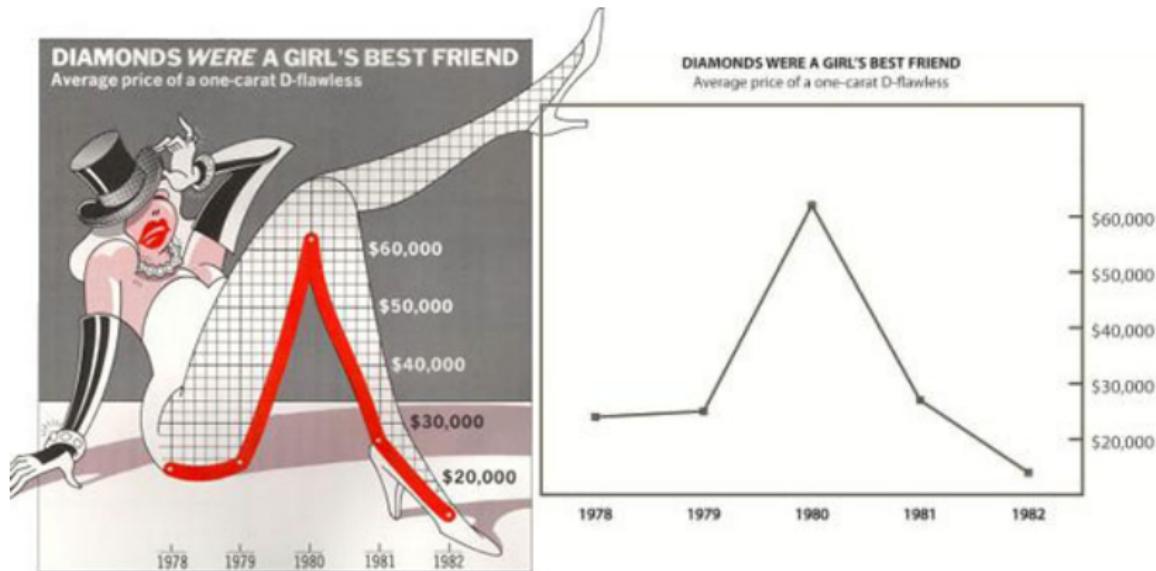
# WINTER IS COMING

# Galactic Civil War

Figurative map of Imperial Navy troop losses  
in the Galactic Civil War, 0 BBY-5ABY

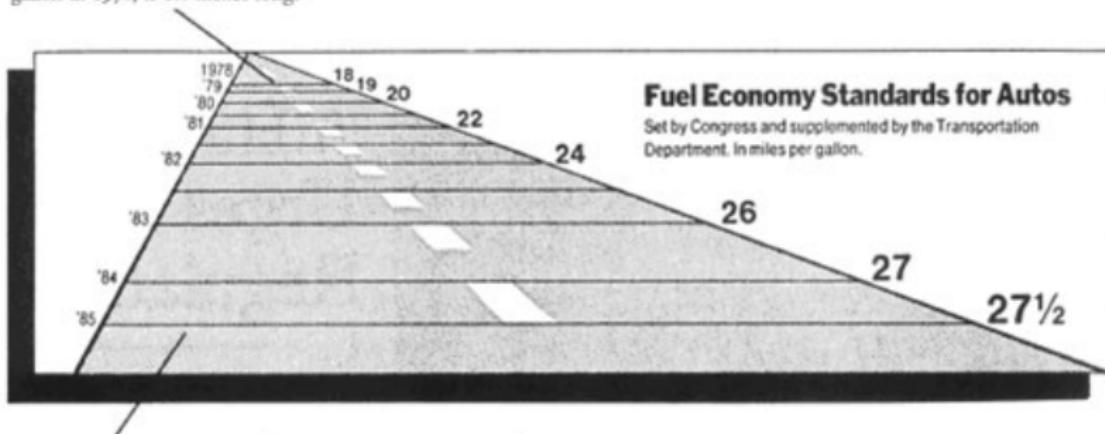


# Diamonds Were A Girl's Best Friend



# Fuel Economy

This line, representing 18 miles per gallon in 1978, is 0.6 inches long.

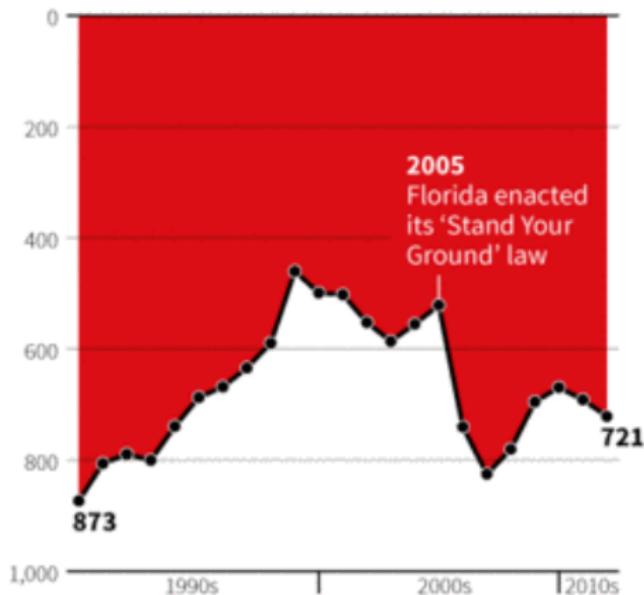


This line, representing 27.5 miles per gallon in 1985, is 5.3 inches long.

# Gun Deaths in Florida

## Gun deaths in Florida

Number of murders committed using firearms

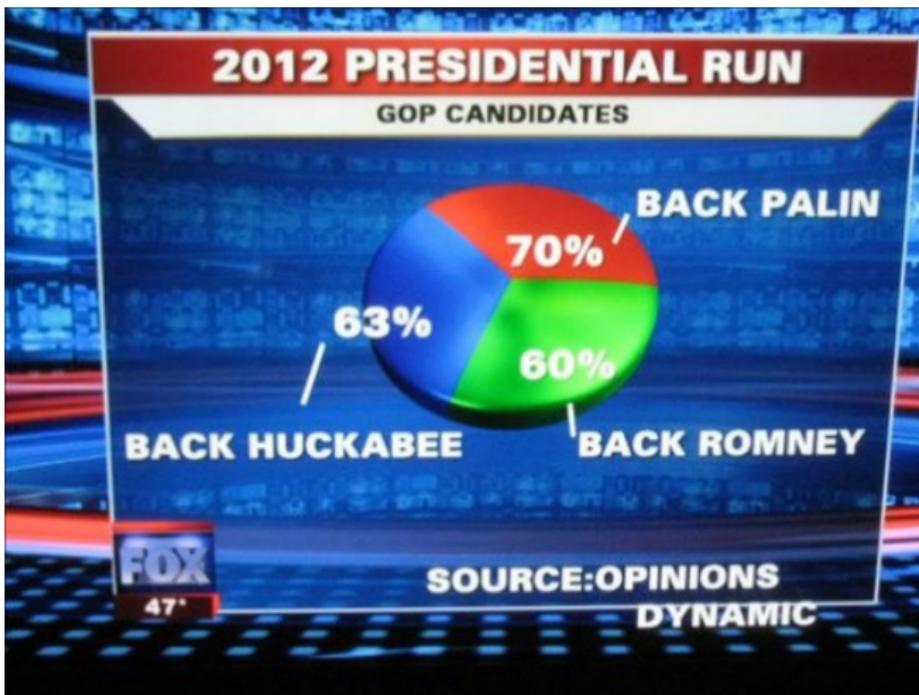


Source: Florida Department of Law Enforcement

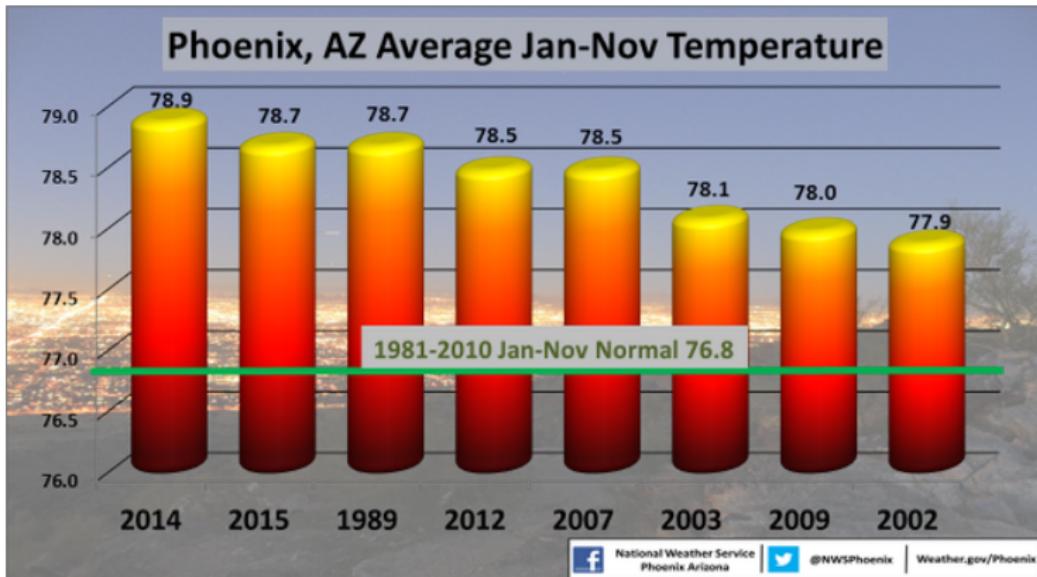
C. Chan 16/02/2014

REUTERS

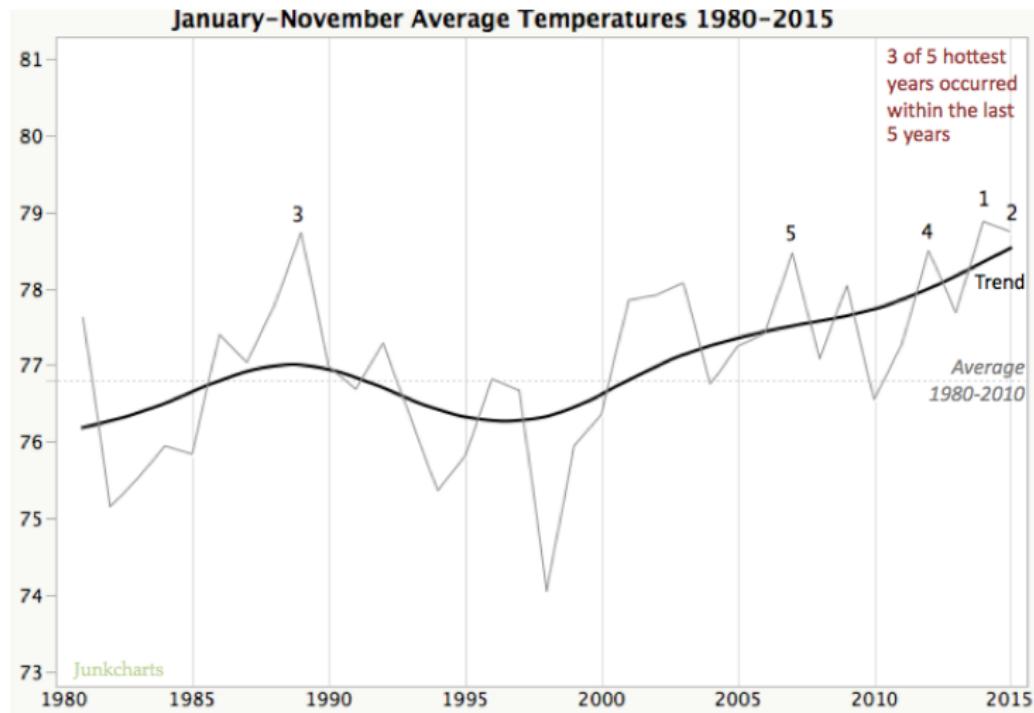
# Fox News – Presidential Candidates



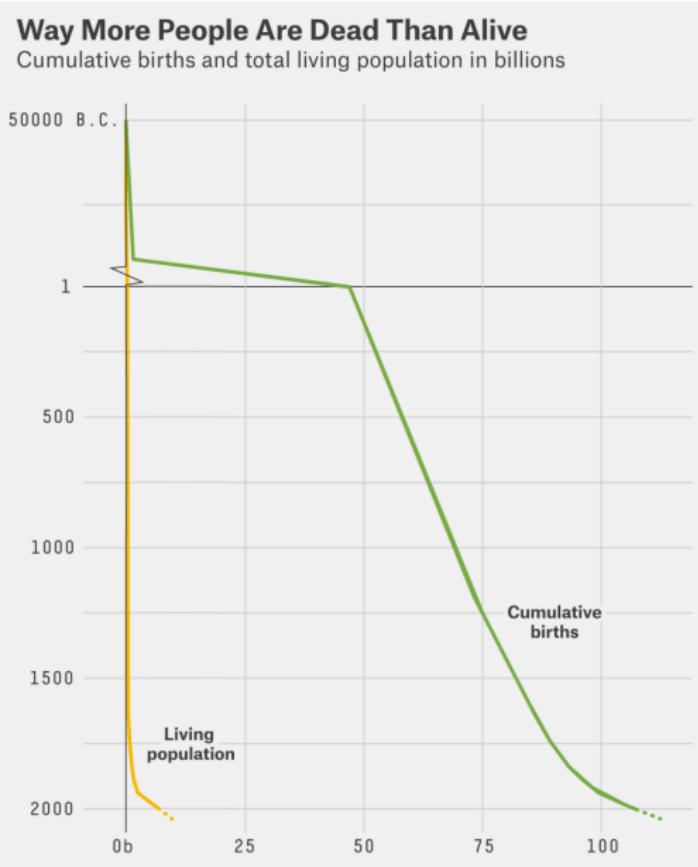
# Temperature in Arizona



# Temperature in Arizona

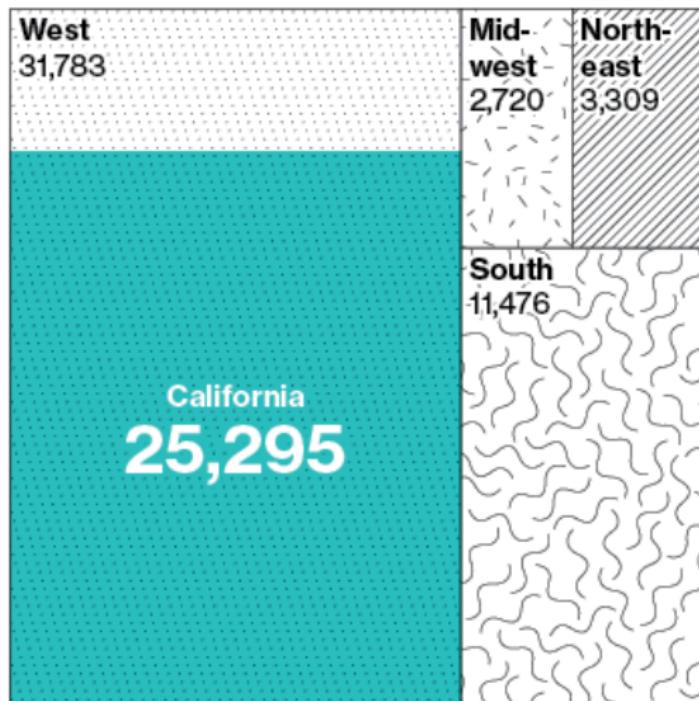


# How Many People Have Ever Lived?



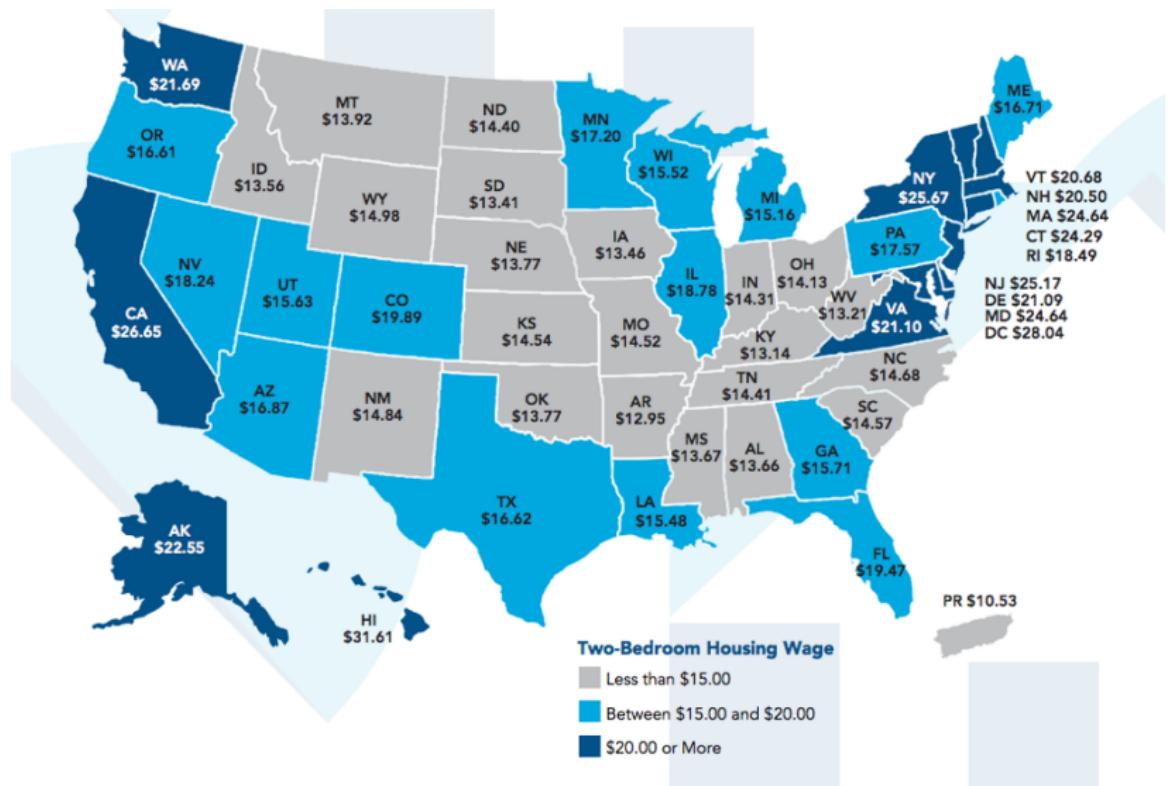
# Electric Vehicle Sales

## U.S. electric vehicle sales by region January through September 2015



GRAPHIC BY BLOOMBERG BUSINESSWEEK  
DATA: IHS AUTOMOTIVE

# Hourly Wages to Afford Two-Bedroom Apartment



# NFL Blindness

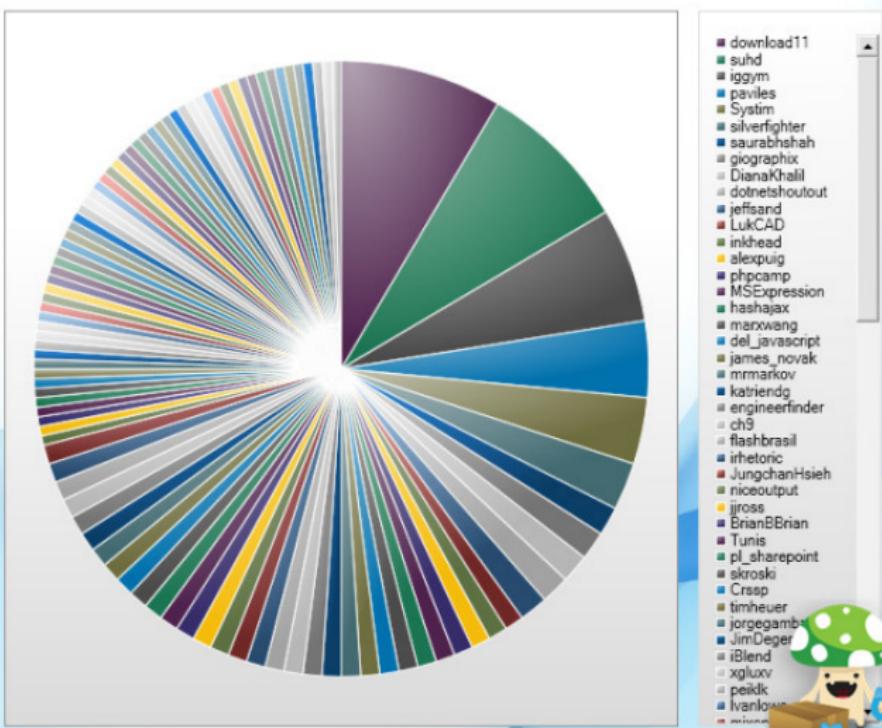


# NFL Blindness

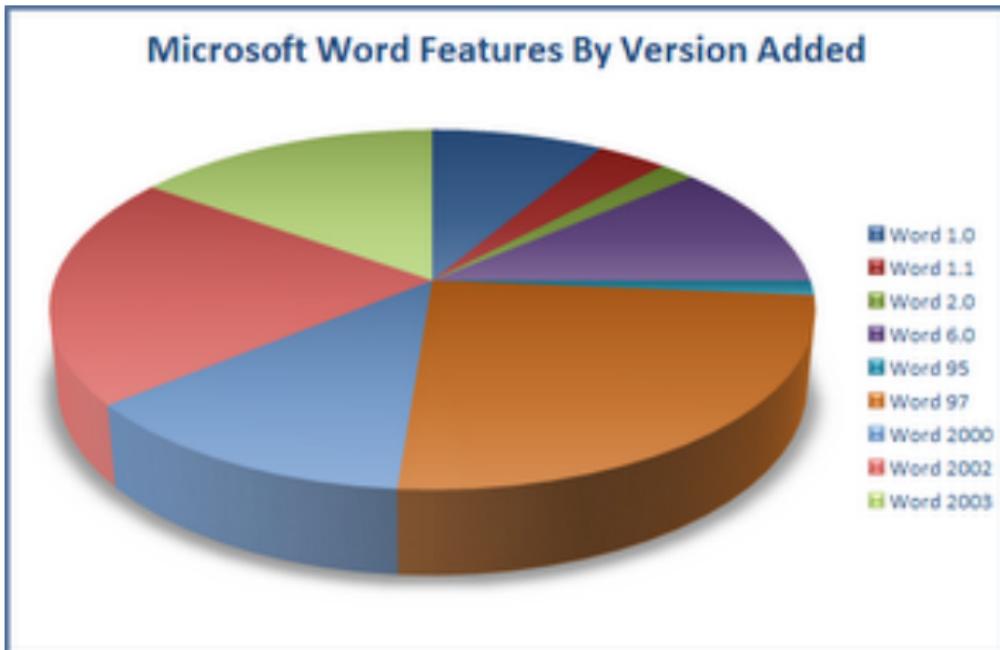


# Top 100 Tweeters

100 Most Active Tweeters



# Never Make 3-D Pie Charts



# The Only Acceptable Pie Chart

