

# (Dis)information visualization

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# Outline

Good data visualization

Academic

Media

Excel

Things to remember

# Outline

Good data visualization

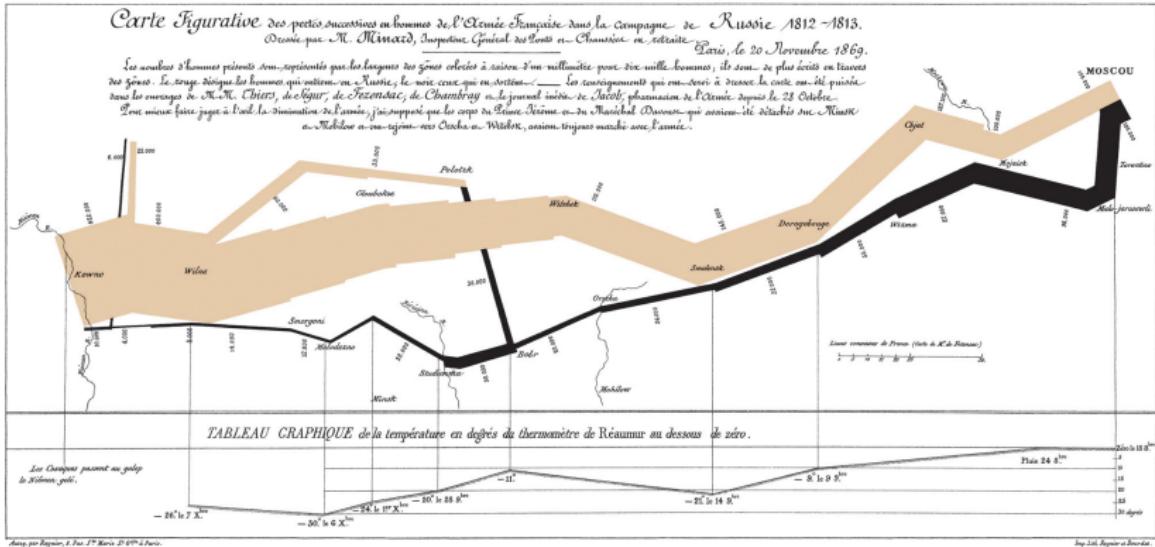
Academic

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Things to remember

## Minard's depiction of Napoleon's invasion of Russia



# Good advice



# Outline

Good data visualization

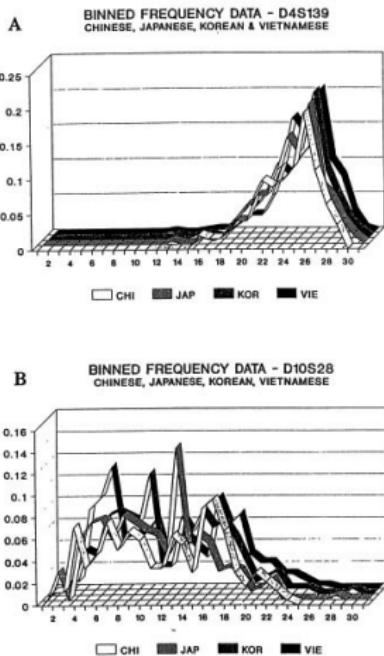
Academic

Media

Excel

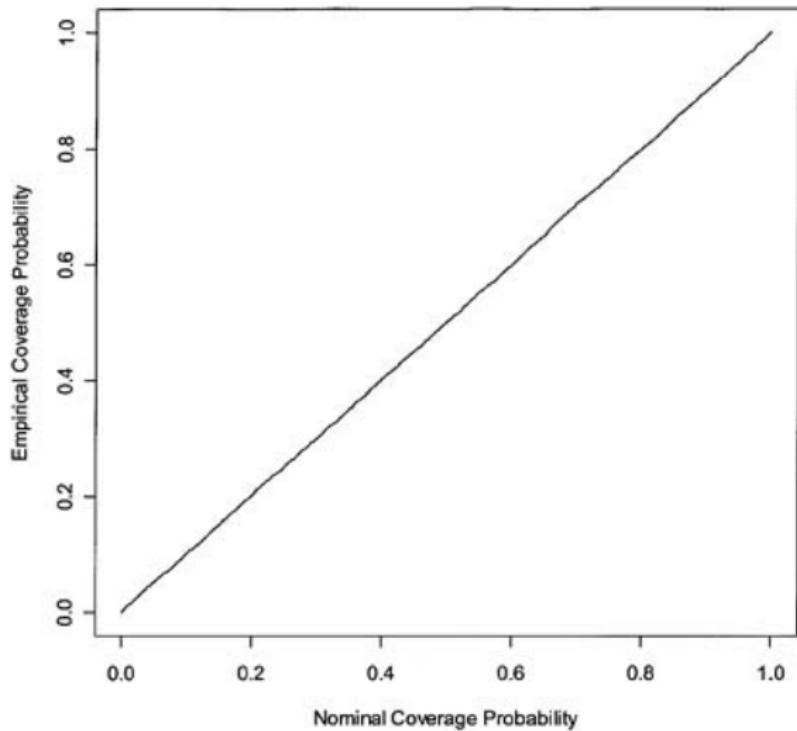
Things to remember

## Pardon me as I cry



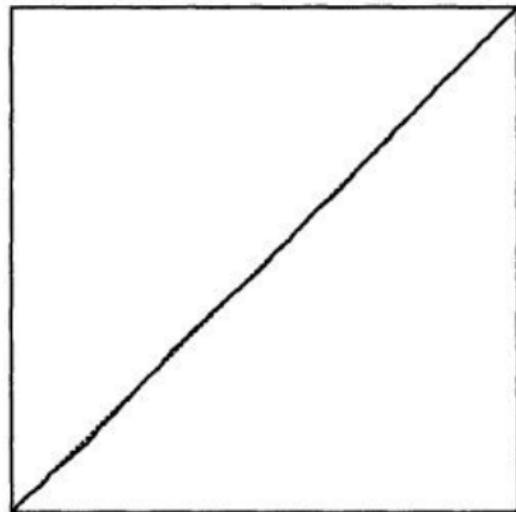
**Fig. 4.** Fixed bin distribution (histogram) for two loci and four Asian subpopulations (used with permission from John Hartmann): the boundaries of the 30 bins (vertical axis) are determined by the FBI; these bins are not of equal length. Sample sizes (numbers of individuals) for Chinese, Japanese, Korean and Vietnamese are 103, 125, 93 and 215 for D4S139 and 120, 137, 100 and 193 for D10S281. The horizontal axis is the bin number; bins are not of equal length.

## These say what exactly?

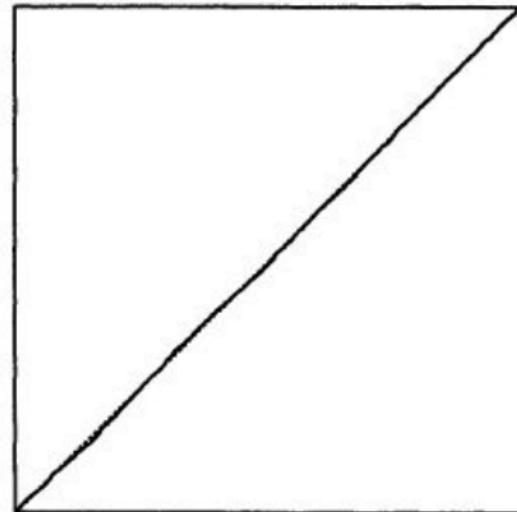


**Figure 1** Empirical coverage of CIs for the relative-risk parameter  $\beta$  of haplotype 01100. Results are based on 10,000 simulated data sets with the same haplotype frequencies as the FUSION data. Haplotype 01100 has a multiplicative effect on disease risk, with  $\beta = 0.35$ .

Surely that was a unique phenomenon...



(a)



(b)

Figure 1. SRQ Plots of  $T_i/T_n$  (Vertical Axes) Against  $i/n$  (Horizontal Axes) for the Gibbs Sampler (a) and an Alternating Gibbs/Independence Sampler (b) for the Pump Failure Data Based on Runs of Length 5,000. Lines through the origin with unit slope are shown dashed; axis ranges are from 0 to 1 for all axes.

# What is worse than one piechart?

## Distribution of All TFBS Regions

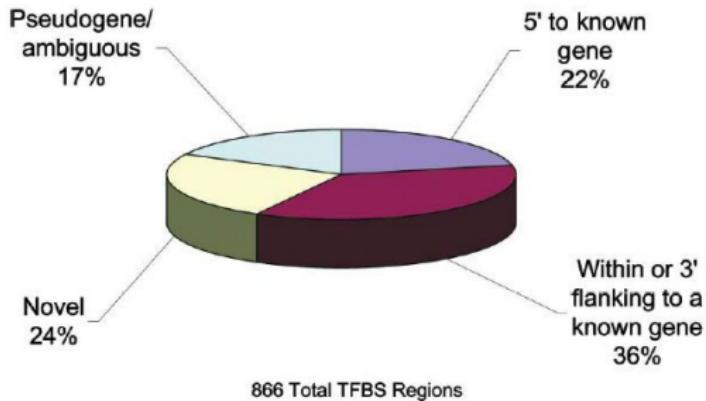


Figure 1. Classification of TFBS Regions

TFBS regions for Sp1, cMyc, and p53 were classified based upon proximity to annotations (RefSeq, Sanger hand-curated annotations, GenBank full-length mRNAs, and Ensembl predicted genes). The proximity was calculated from the center of each TFBS region. TFBS regions were classified as follows: within 5 kb of the 5' most exon of a gene, within 5 kb of the 3' terminal exon, or within a gene, novel or outside of any annotation, and pseudogene/ambiguous (TFBS overlapping or flanking pseudogene annotations, limited to chromosome 22, or TFBS regions falling into more than one of the above categories).

# Can it even get worse?

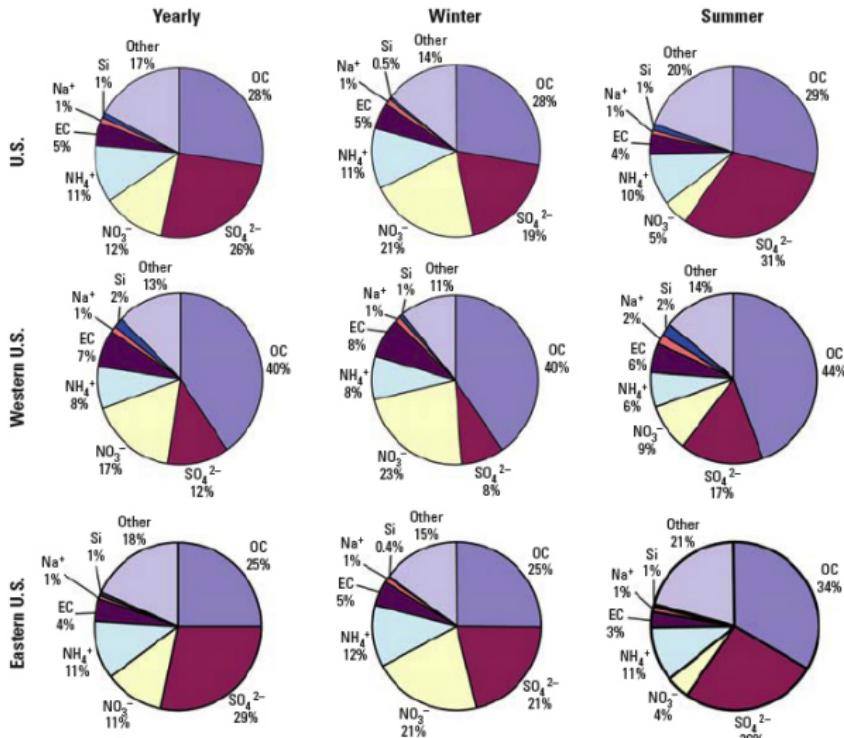
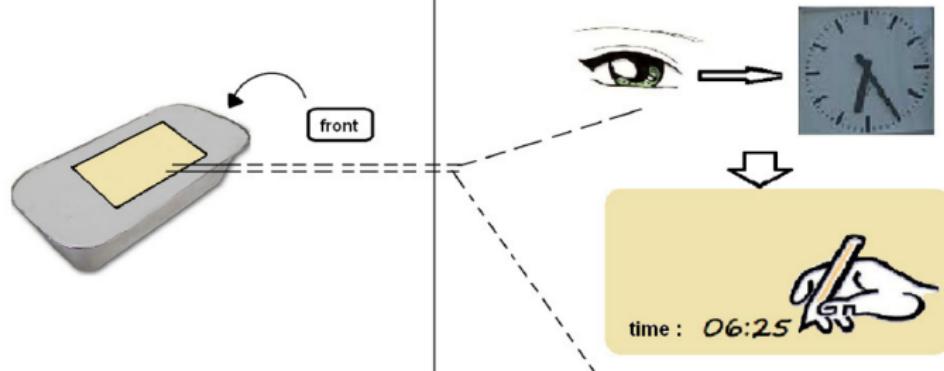
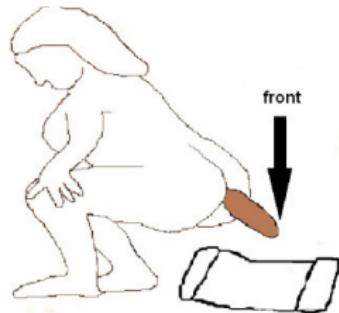


Figure 3. Percent of PM<sub>2.5</sub> composition by component for yearly, winter, and summer averages, by region.

# Pardon me as I vomit



wtf is this

nerd shit

# Outline

Good data visualization

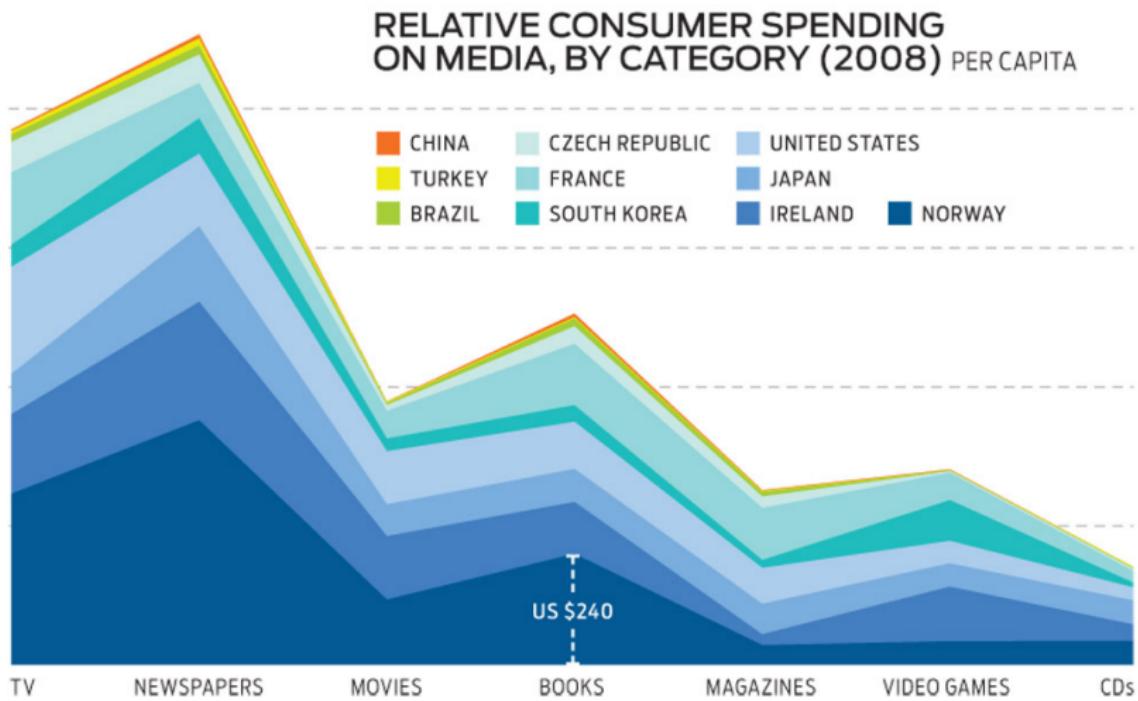
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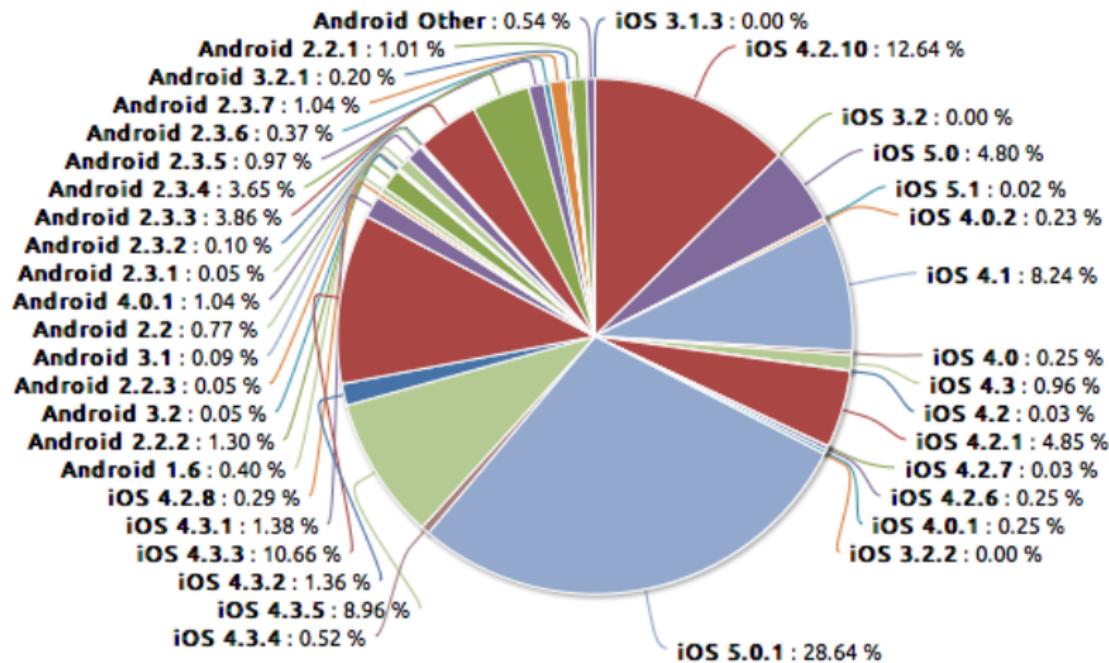
Things to remember

# Wrong choice



Too much.

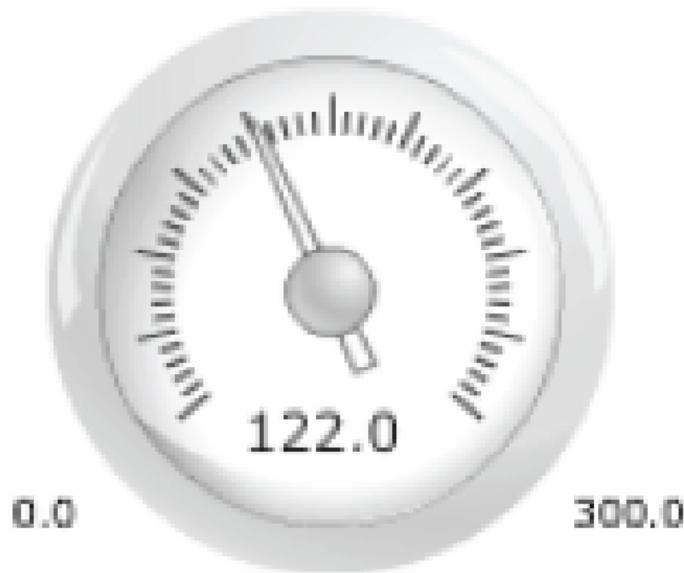
Crashes by OS Version Normalized (12/1 - 12/15)



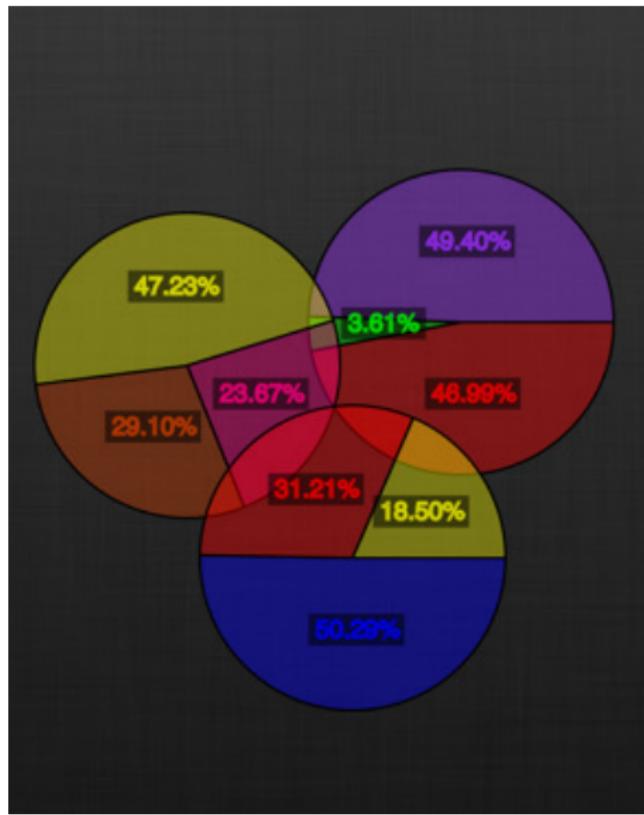
Does this even mean anything?

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## Current Bike Production Rate



# Why can't I hold all these graphical sins?



# What is this I don't even

## Sotheby's / Christie's

### Worldwide Sales Market Share Analysis

1985

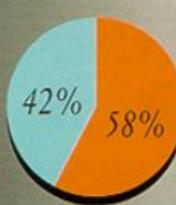
1986

1987

1988

1989

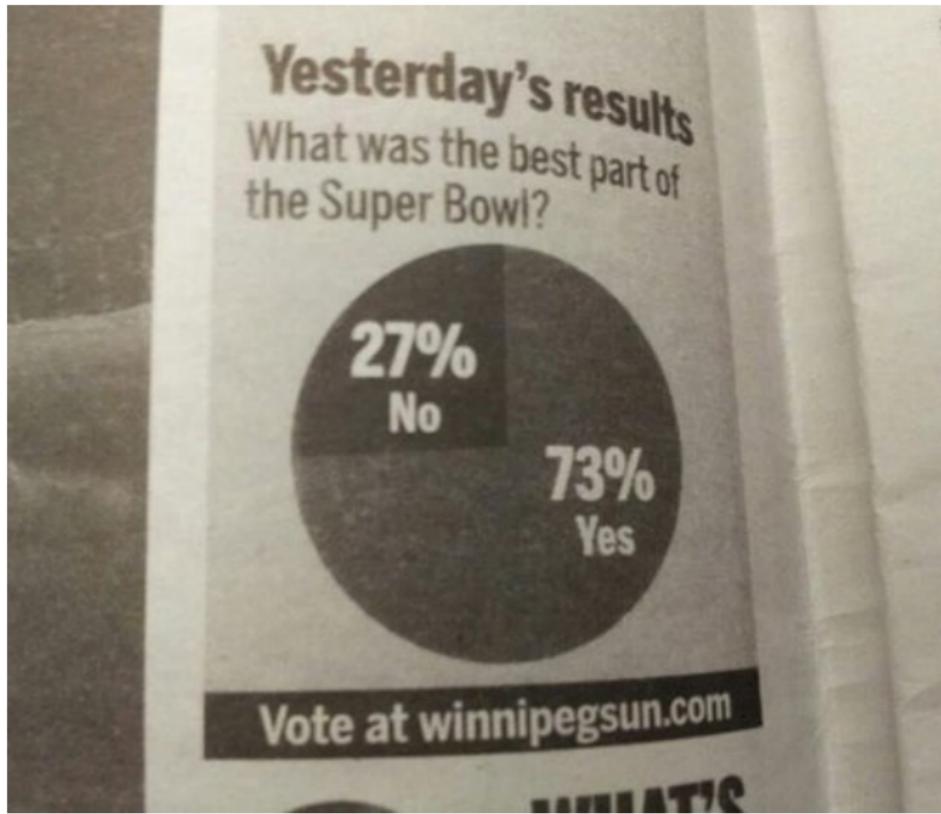
1990



SOTHEBY'S  
CHRISTIE'S

Market Share Analysis With Buyer's Premium

Oh god how did this get here I am not good with questions



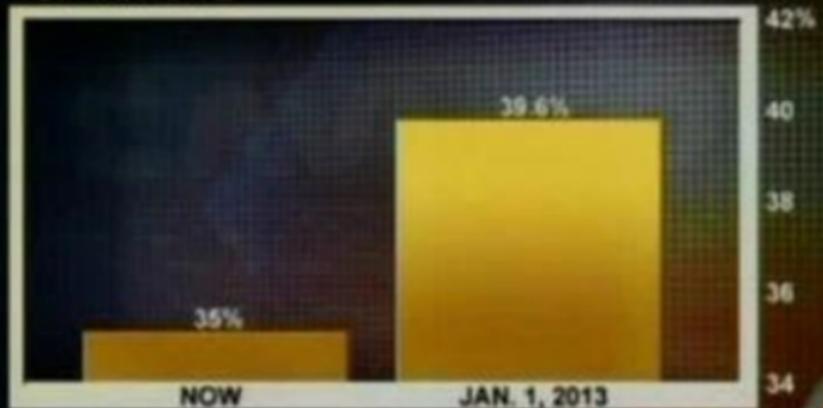
Fox is an easy target



A really easy target...

## IF BUSH TAX CUTS EXPIRE

TOP TAX RATE



8:01 p. ET

**FOX**  
BUSINESS

TOP STORIES

TECHNOLOGY

CONSUMER

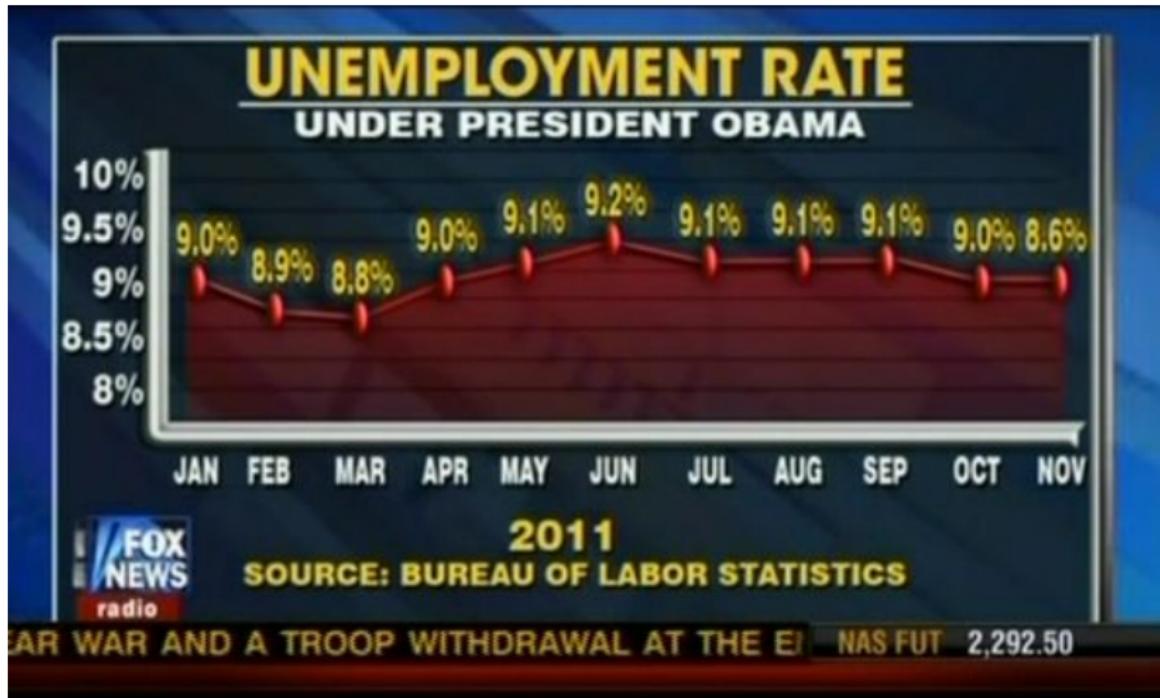
WITH THE JUSTICE DEPARTMENT AND ACQUIRES FULL T

DOW 13008.68 ▼ 64.33

S&P 1379.32 ▼ 5.98

NASDAQ 2939.52 ▼ 6.32

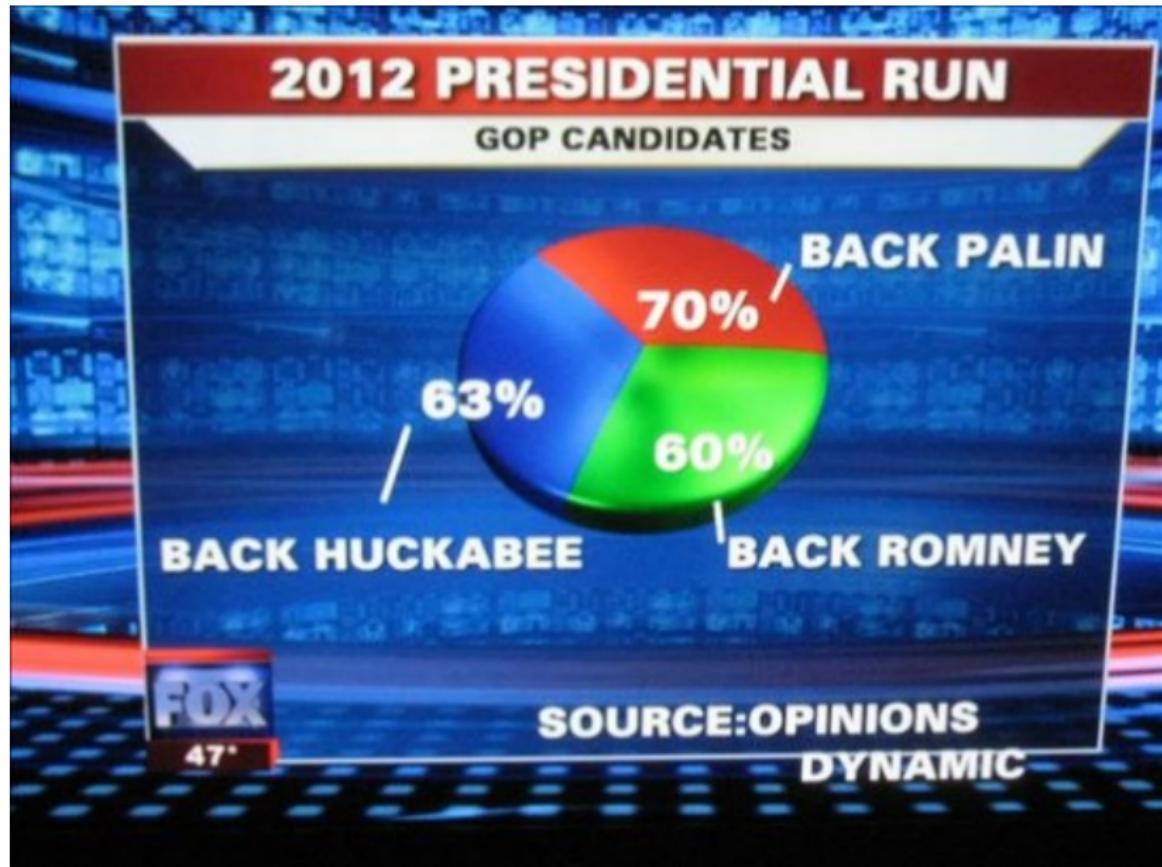
Too easy even



It make me feel bad



They can't even get the worst graph "right"...



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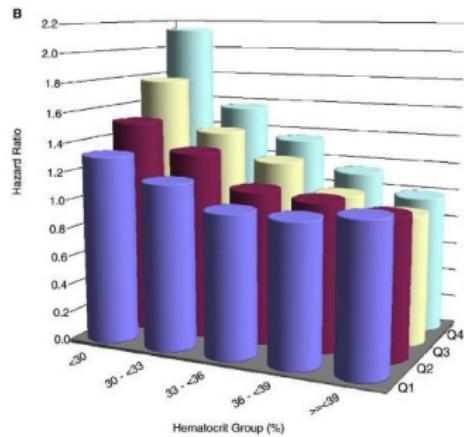
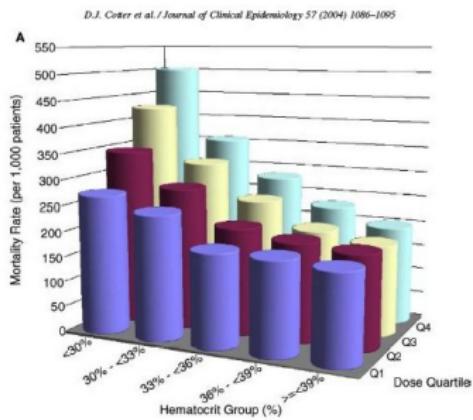
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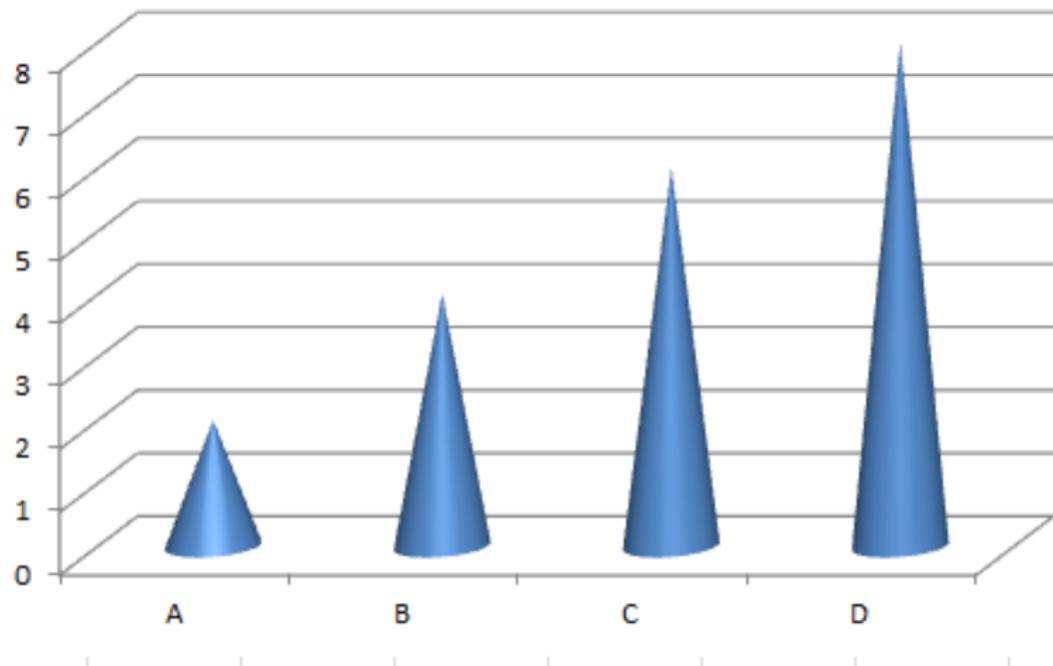
Excel

Things to remember

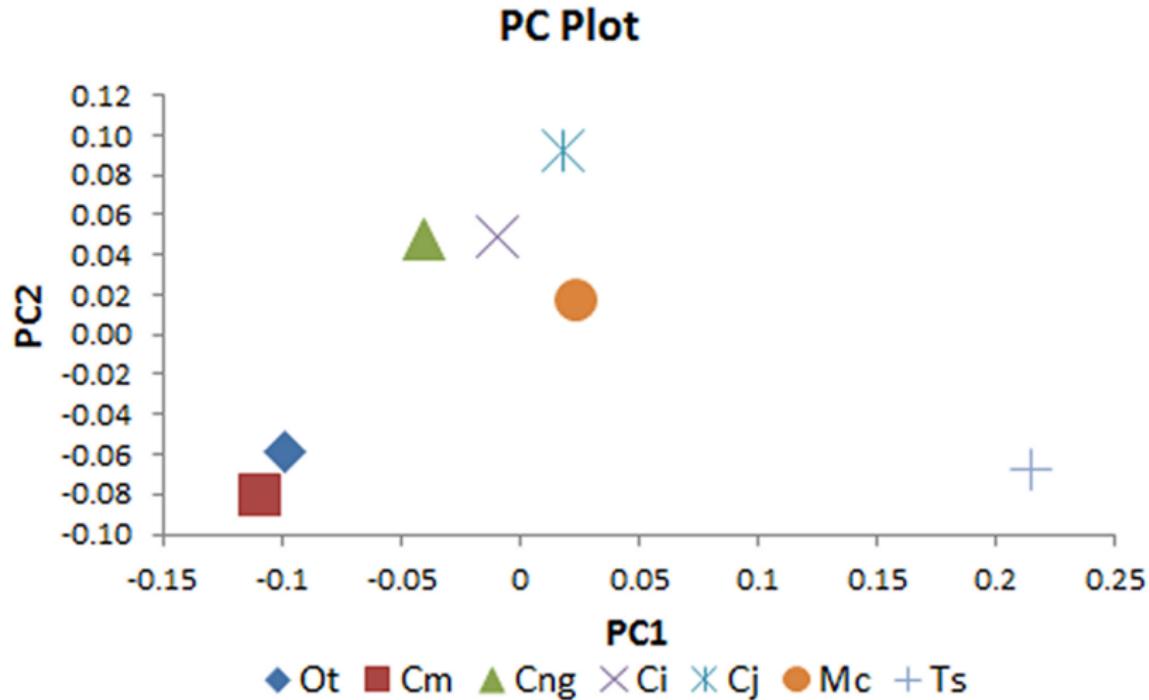
# 3D is best D



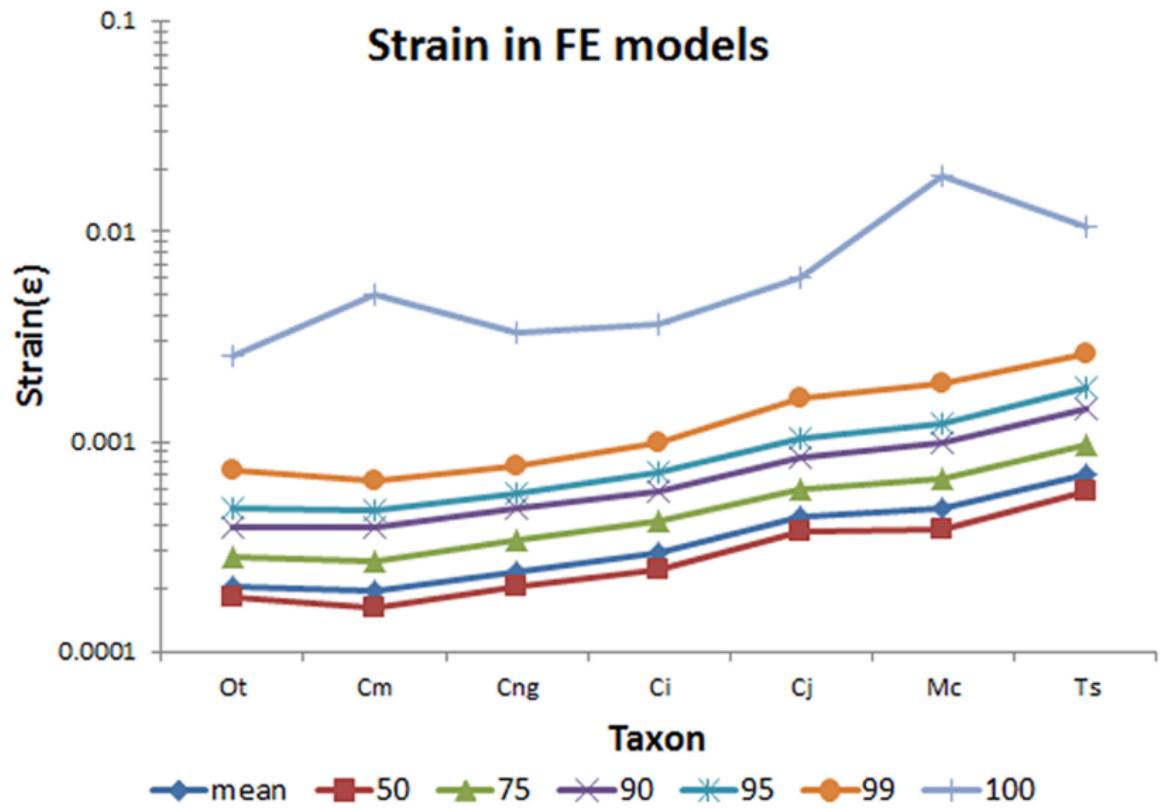
## Absolute best D



I'm embarrassed



Really embarrassed



# Outline

Good data visualization

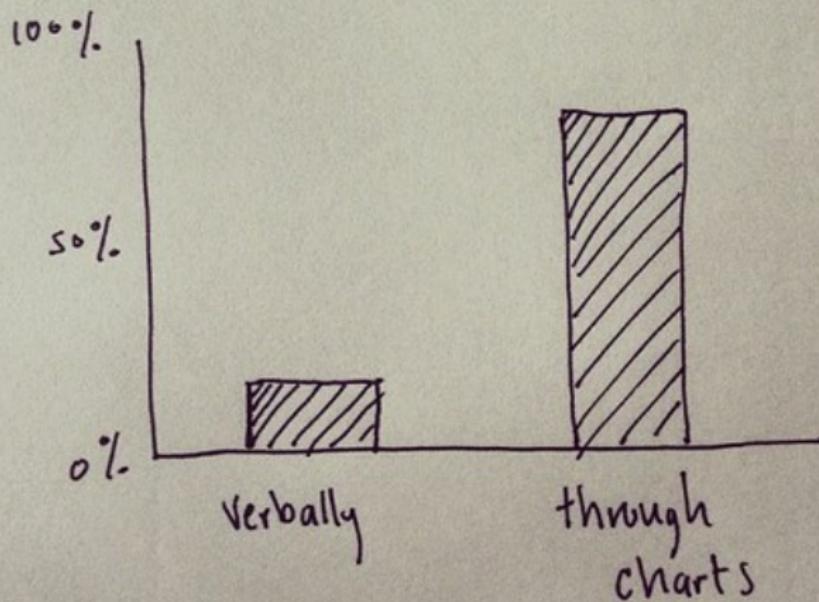
Academic

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Things to remember

success I have in  
expressing myself



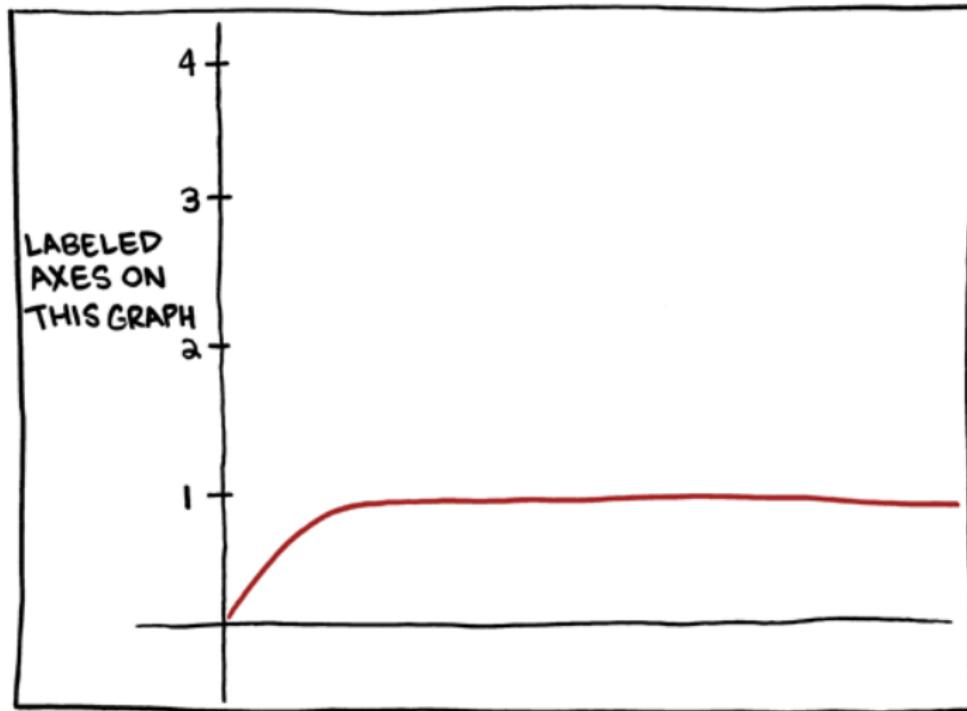
## EFFECTS OF COFFEE BINGE OVER TIME

■ PRODUCTIVITY ■ ANXIETY



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## HOW TO INFURIATE A MATH MAJOR:



**When you SHARE  
poorly researched infographics  
you ride with Hitler!**



**Check your  
Facts and Cite your Sources  
TODAY!**

I'm 12 and what is this?

