

Maps & Other Lesser Known Graphs

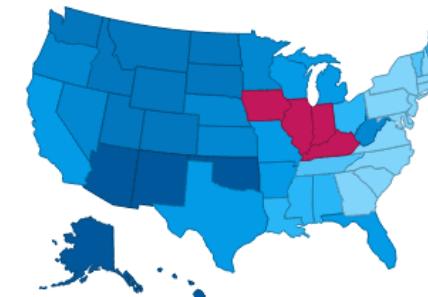
CM4125 – Topic 8

Maps

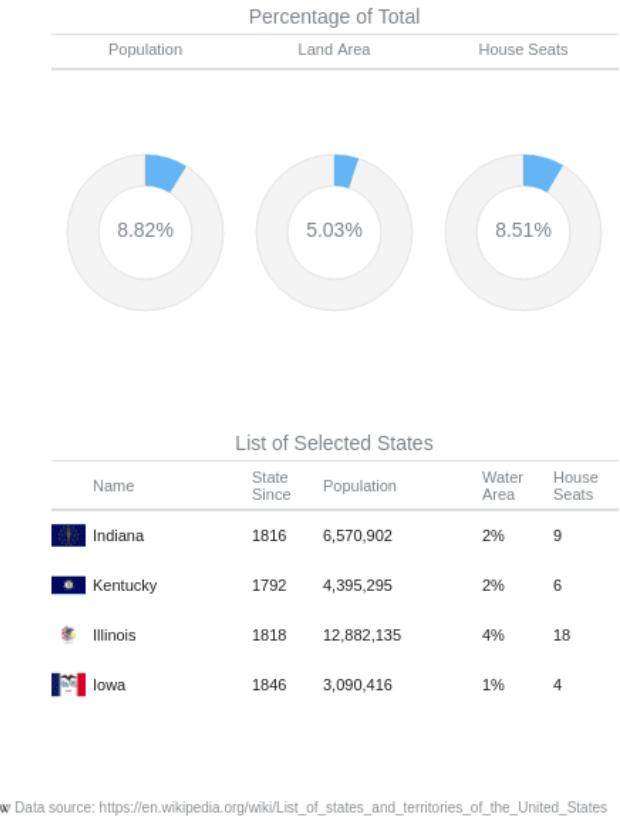
Maps

- Maybe the most widely used visualisation nowadays
- The most logical way to understand population trends

US States
by the Year of Joining the Union
Pick your state or a time period to see when chosen states joined

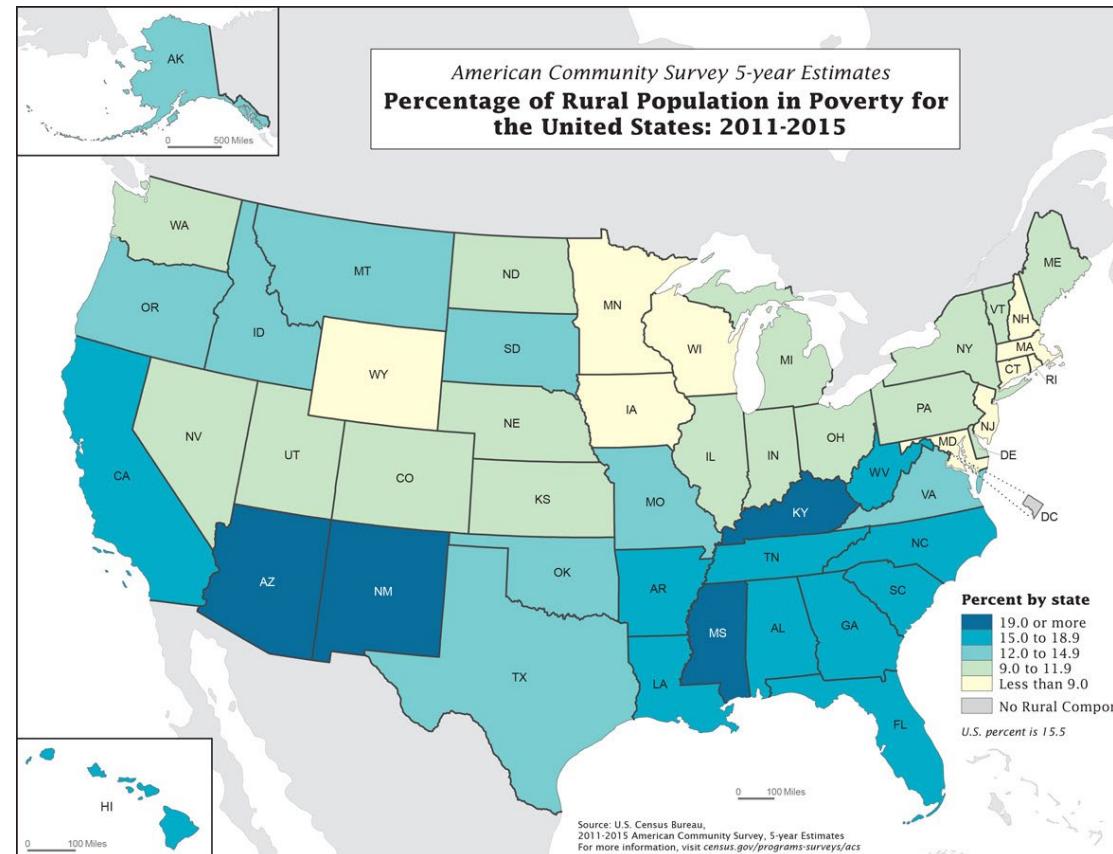


Before 1790 1820 - 1850 After 1900



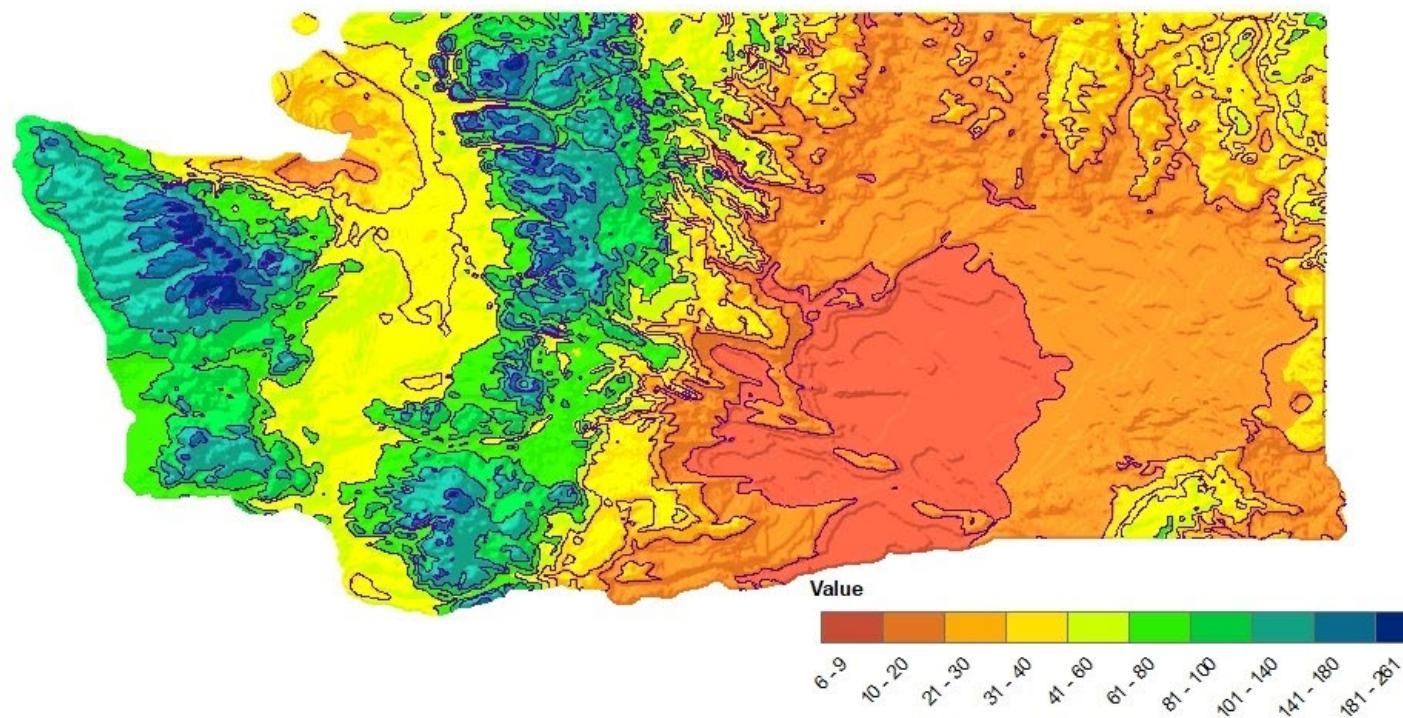
Types of Maps

Choropleth Map



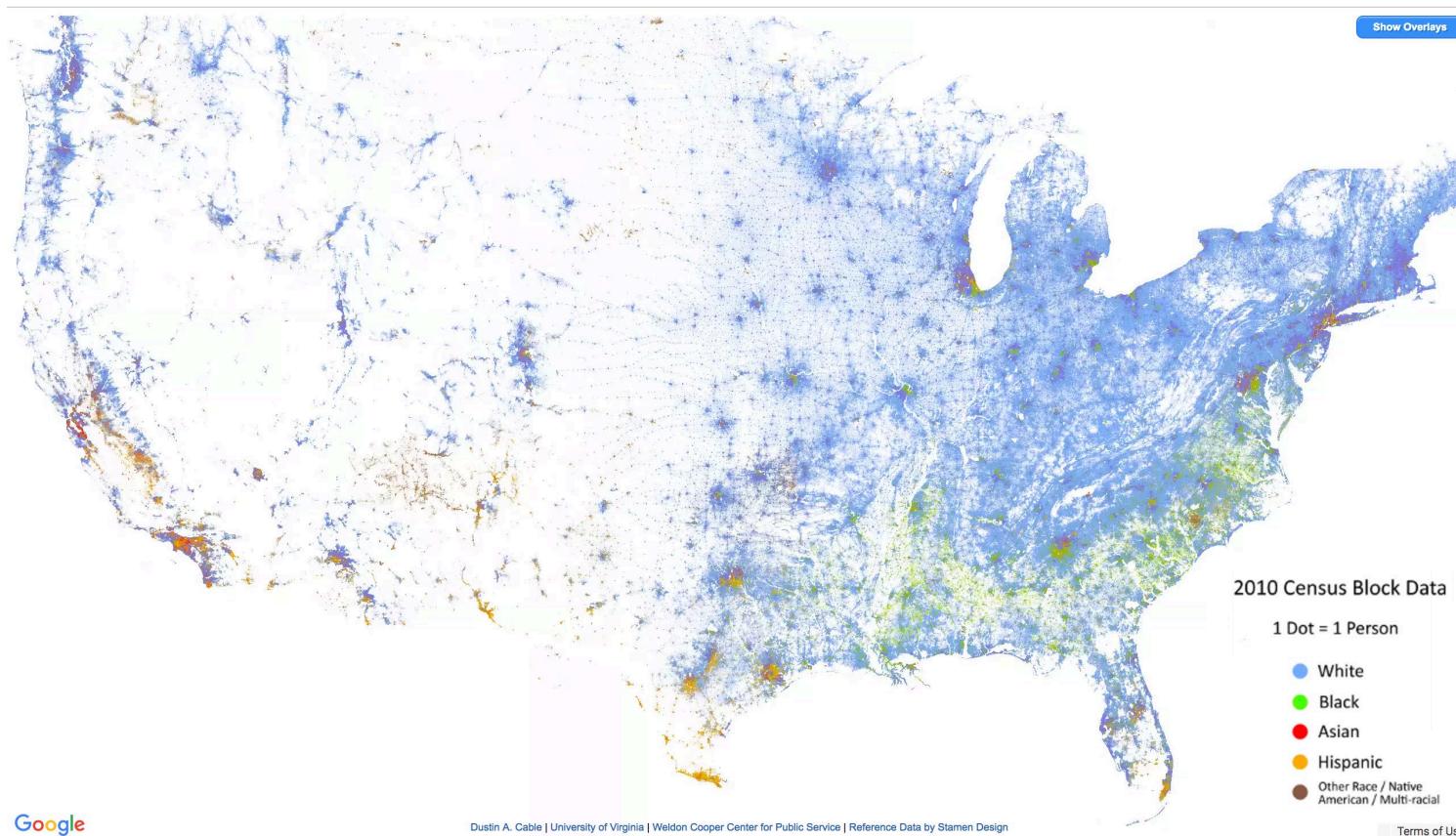
Isarithmic Map

Washington State Annual Precipitation

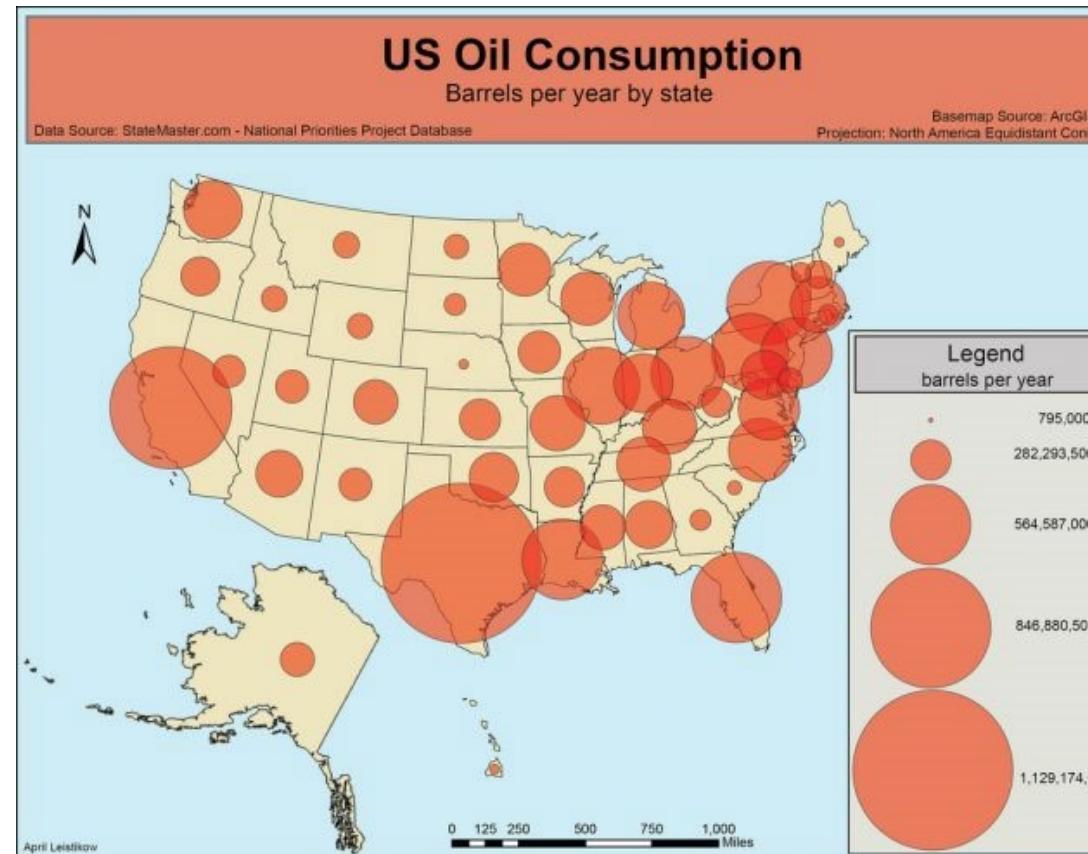


The raster dataset was downloaded from USDA Geospatial Gateway. The dataset is average precipitation in inches for the

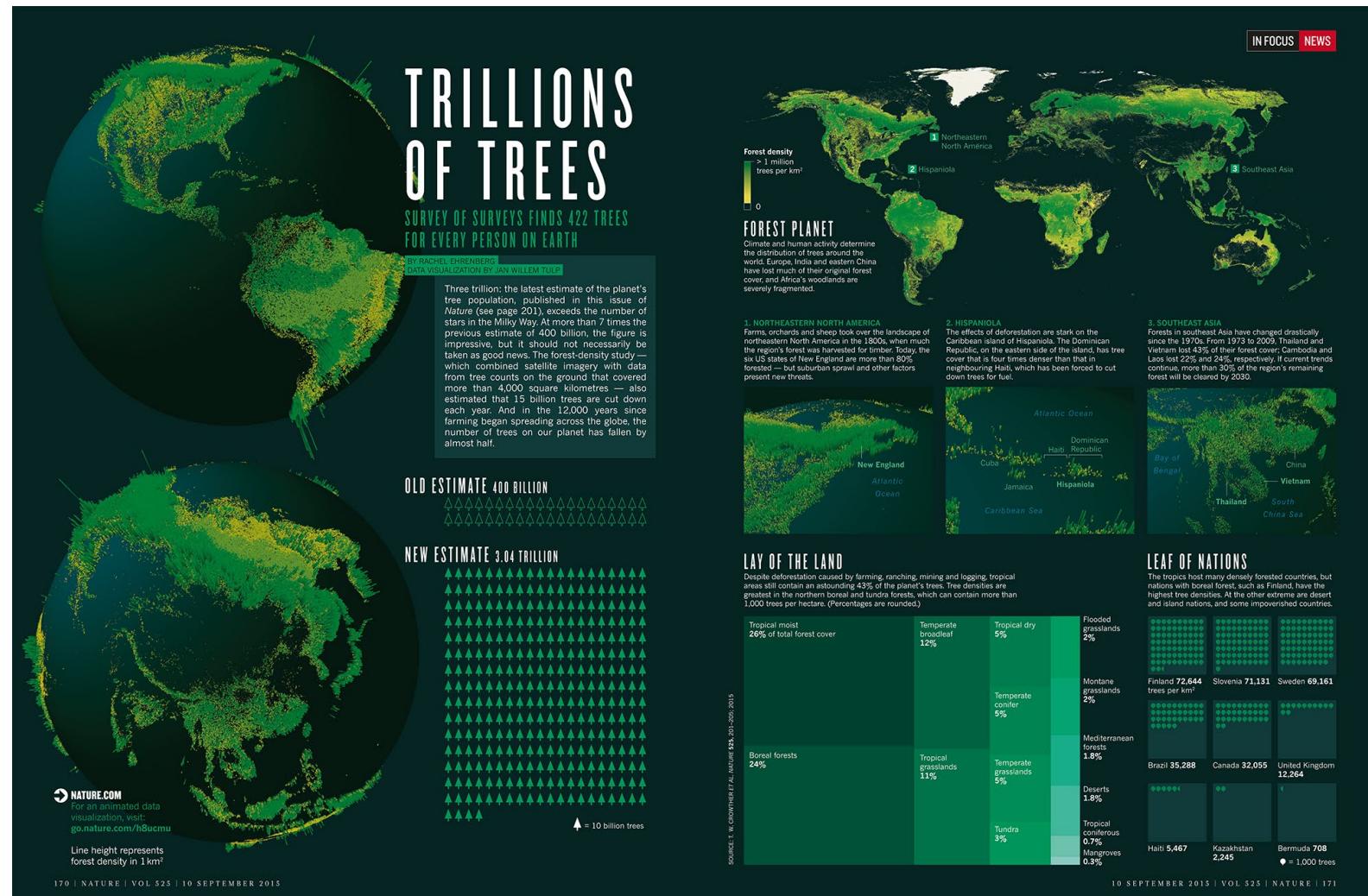
Dot Map



Proportional Symbol Map



Prism Map

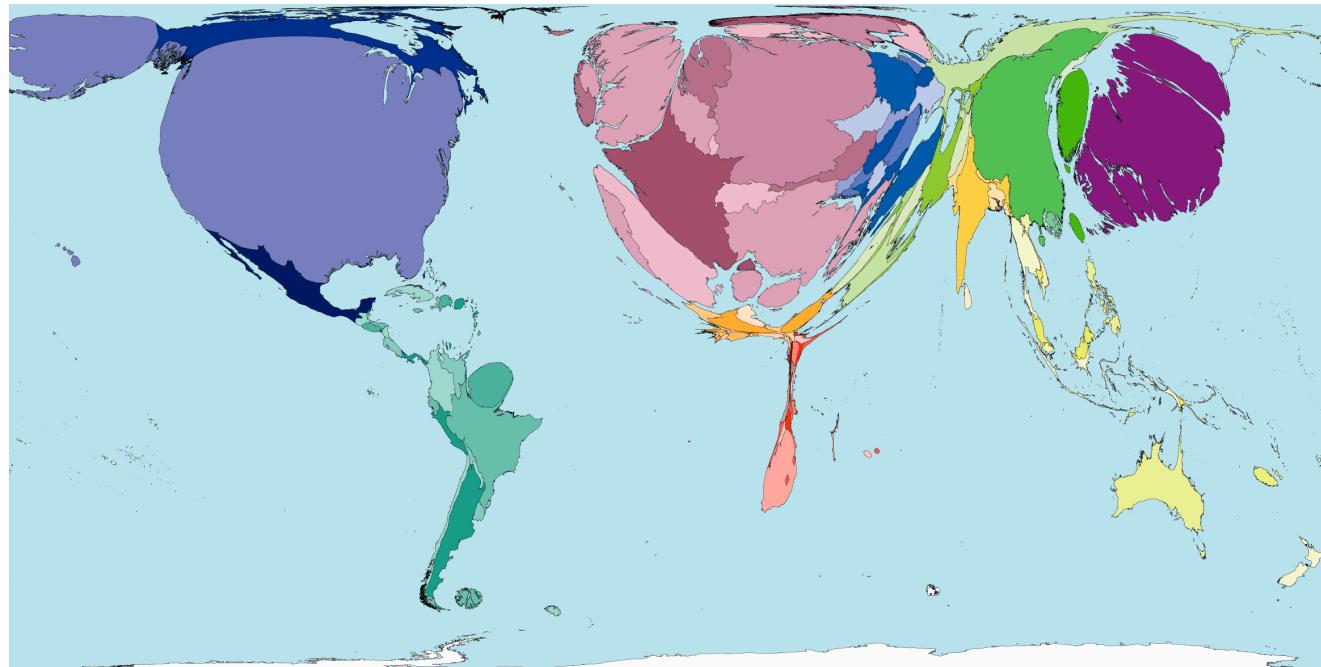


Flow Map



<https://multimedia.scmp.com/culture/article/SCMP-printed-graphics-memory/lonelyGraphics/201210A113.html>

Area Cartogram



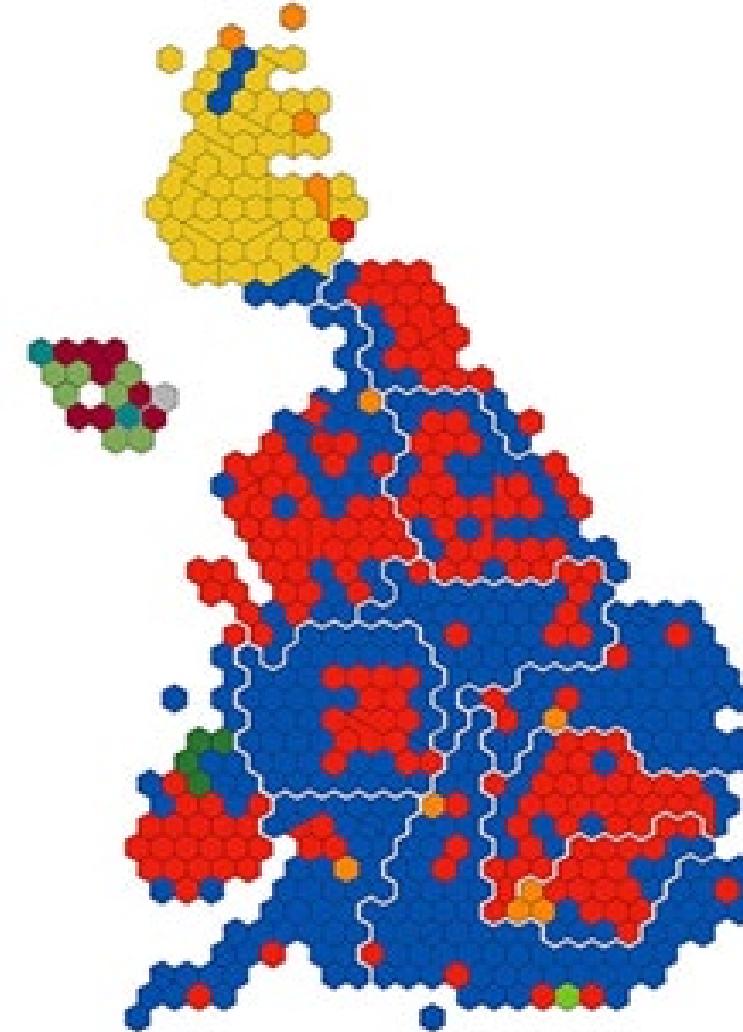
<https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.0040001>

Dorling Cartogram



<https://blog.datawrapper.de/cartograms/>

Grid Map



Map Word Cloud



Copyright © Pello.co.u

GREAT BRITISH BANDS

 Art inspired by music | www.g
Copyright © Pedro 2013

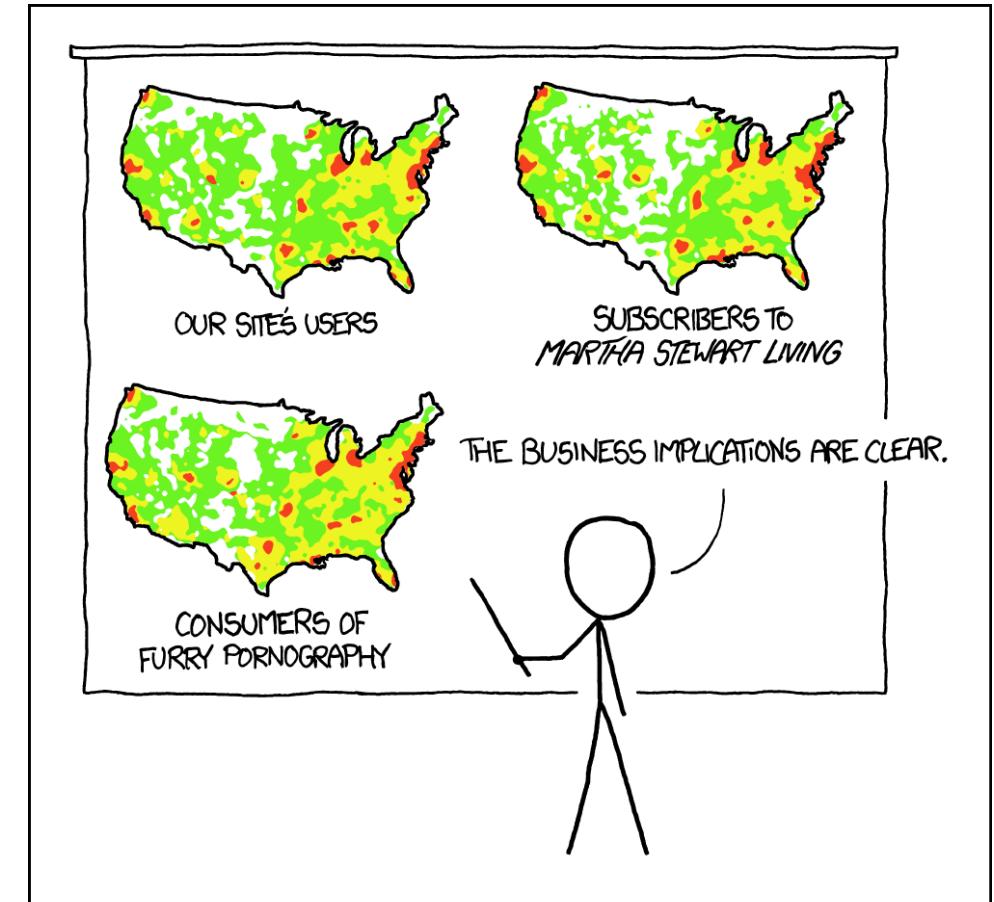


Problems with Maps



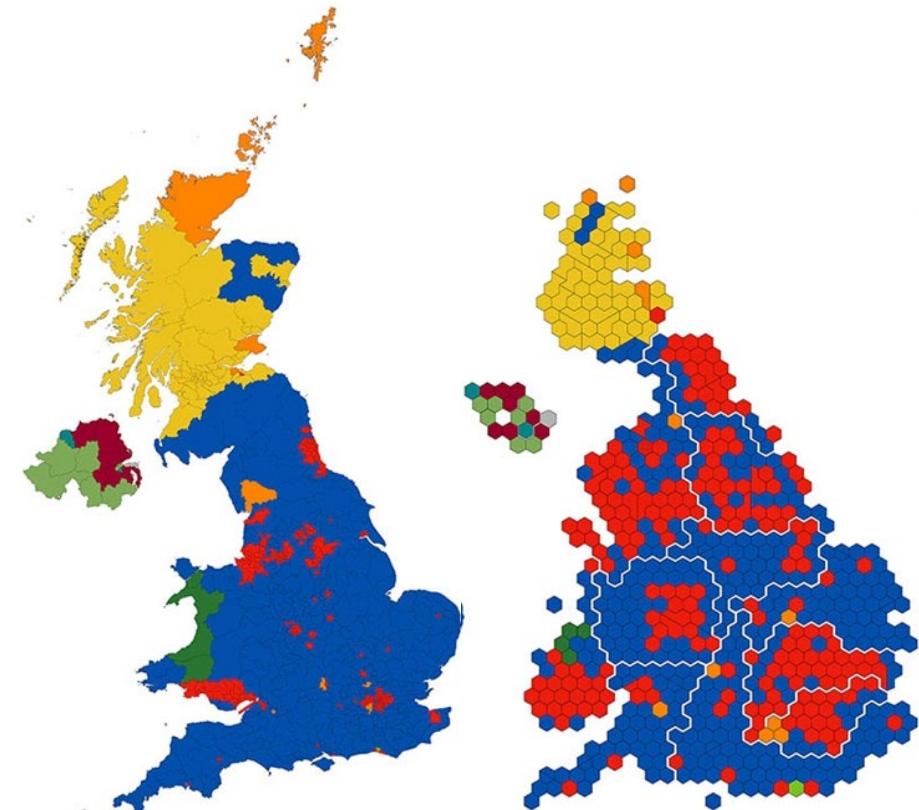
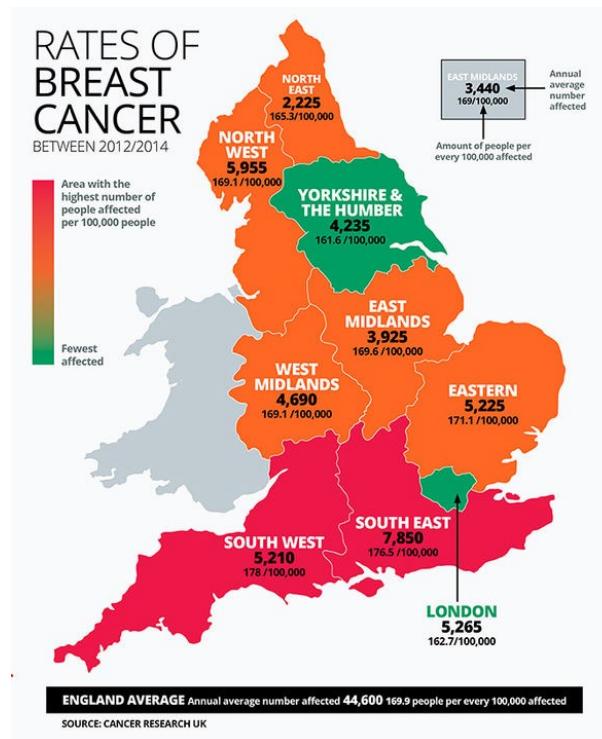
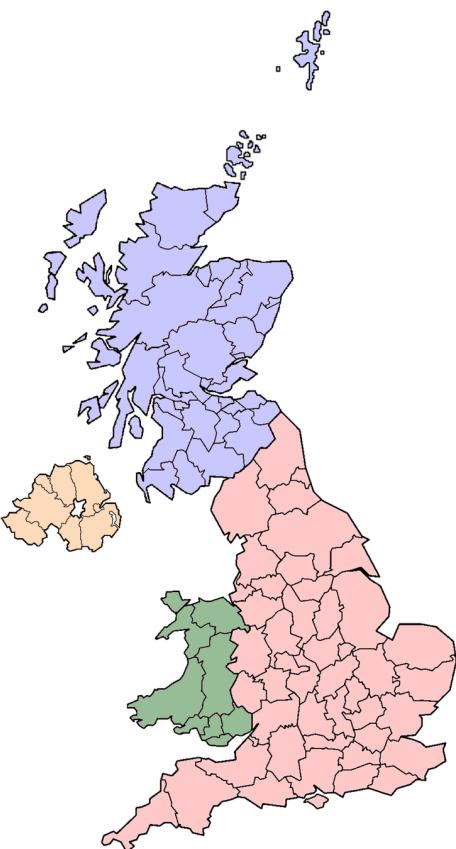
<https://thetruesize.com/>

Problems with Maps



PET PEEVE #208:
GEOGRAPHIC PROFILE MAPS WHICH ARE
BASICALLY JUST POPULATION MAPS

Problems with Maps



US 2020 Election Maps Special

- <https://www.anychart.com/blog/2020/11/06/election-maps-us-vote-live-results/>
- <https://www.wired.com/story/is-us-leaning-red-or-blue-election-maps>

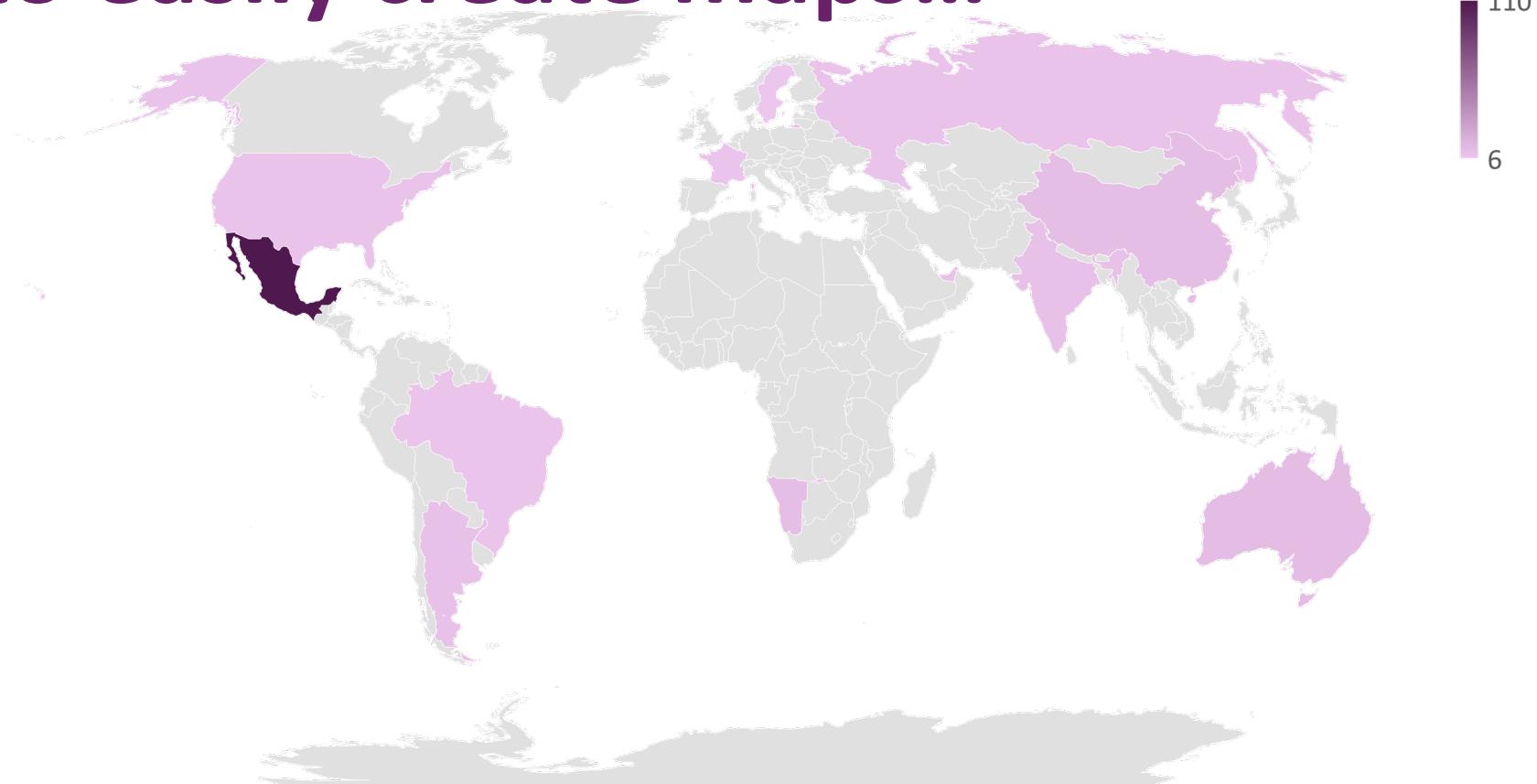
Other interesting ideas for maps

- Create your own maps!
 - <https://artsexperiments.withgoogle.com/ocean-of-books>



Chart Title

How to easily create maps...



Powered by Bing

<https://mapchart.net/>

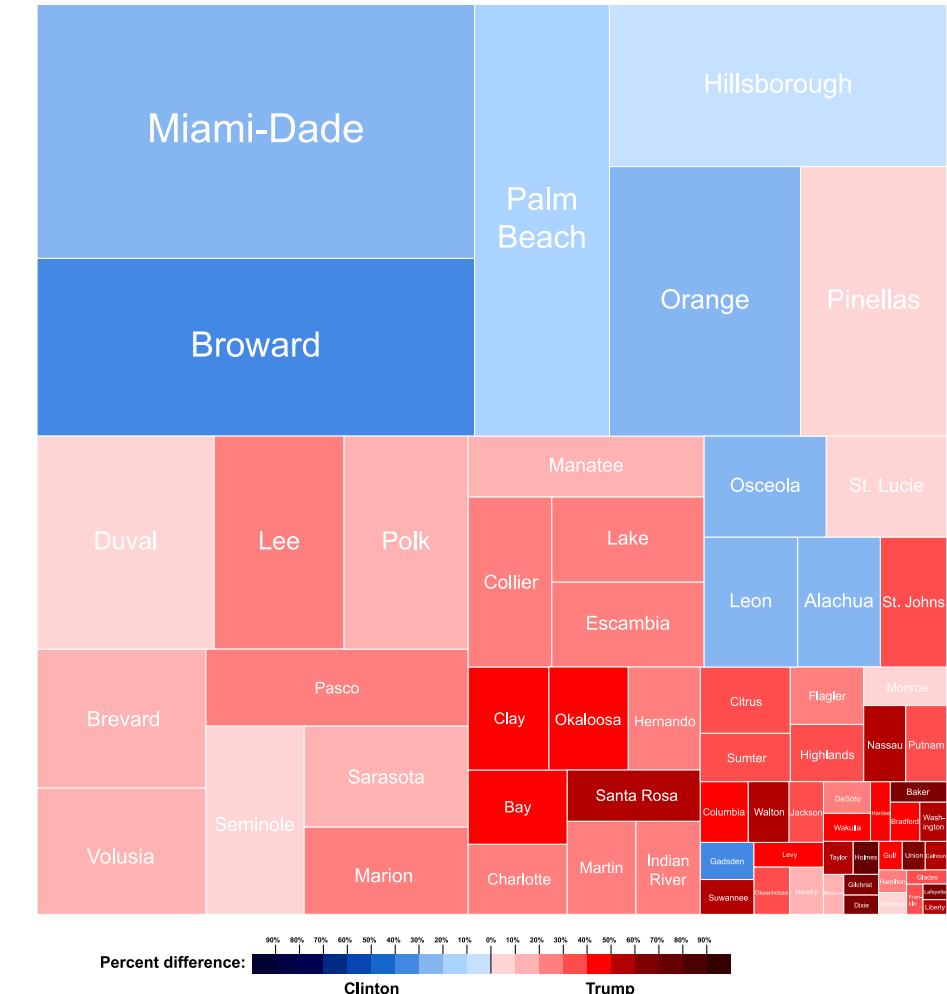
© Australian Bureau of Statistics, GeoNames, Microsoft, Navinfo, TomTom, Wikipedia

Other Vis

Treemap

- Like a Word cloud, but with areas instead of words
- More accurate
- Can be more impactful/exhibitory
 - <https://www.informationisbeautiful.net/visualizations/the-billion-dollar-gram/>

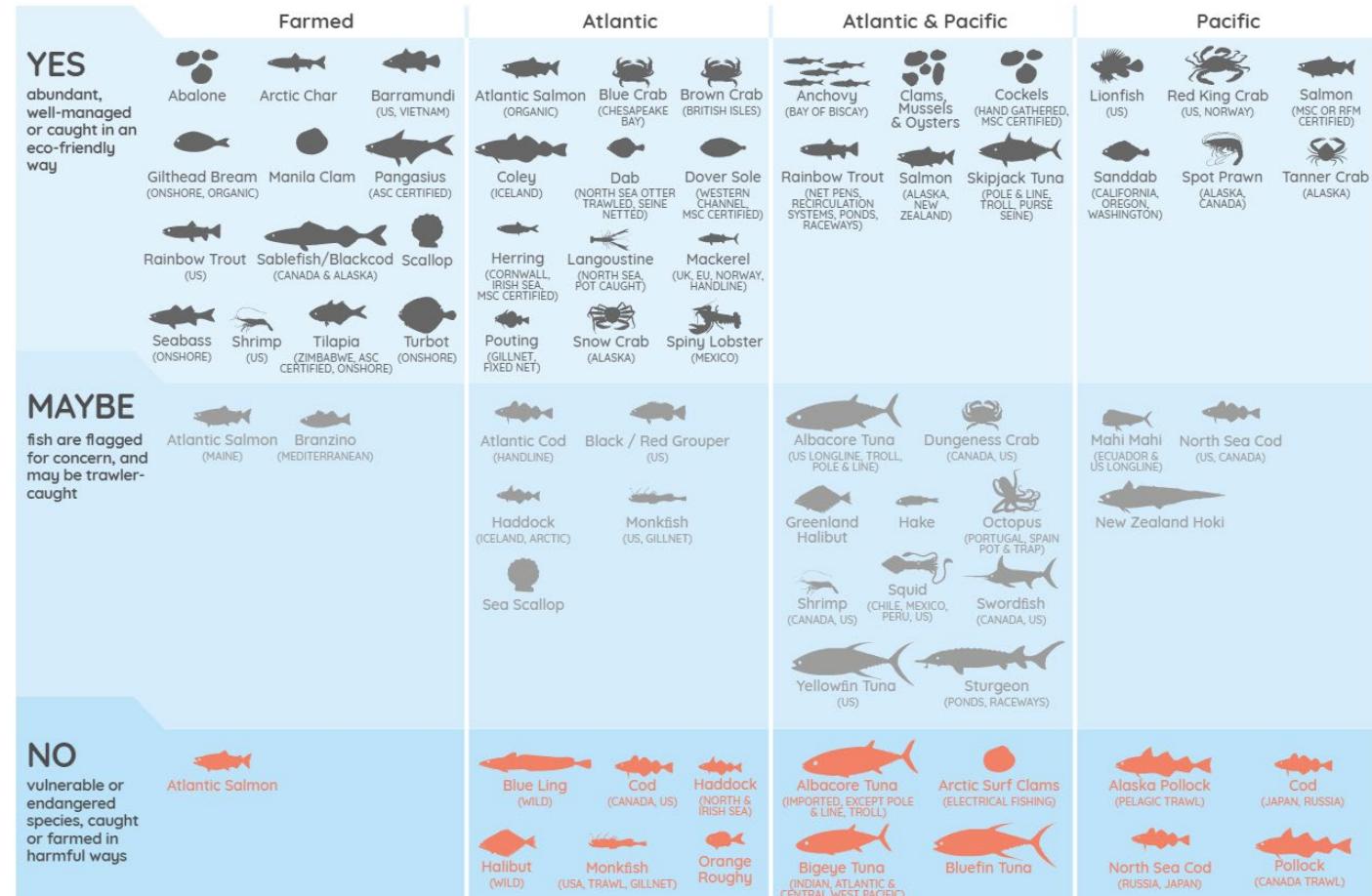
Florida Counties
United States presidential election, 2016



<https://en.wikipedia.org/wiki/Treemapping>

Matrix Charts

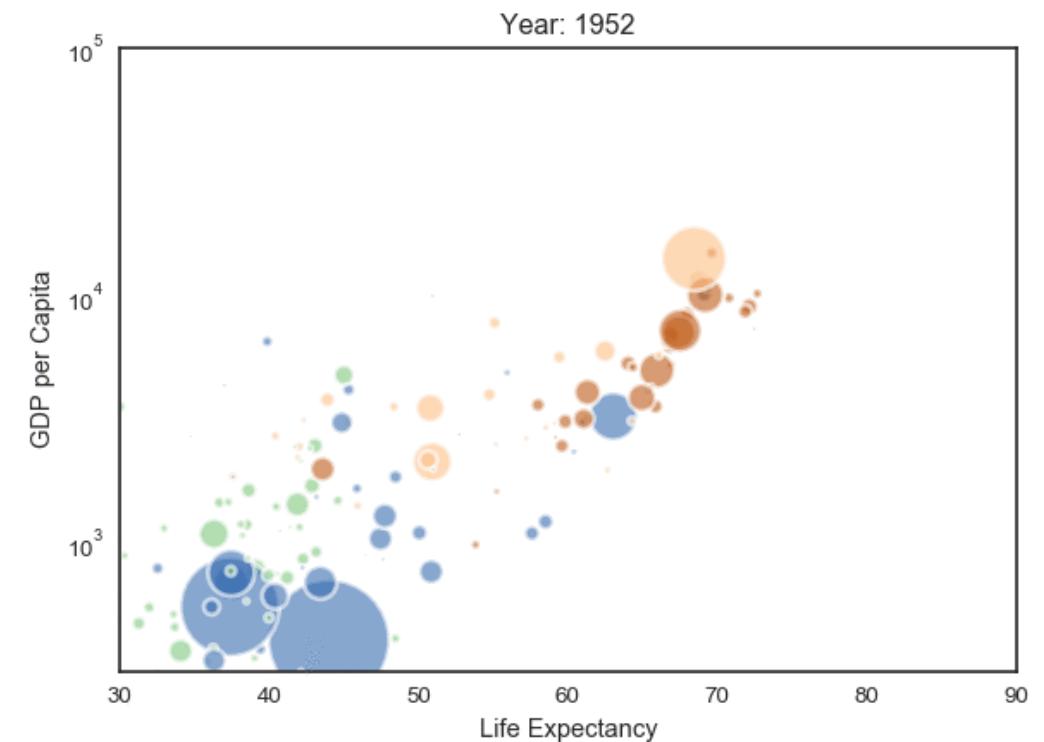
- Instead of simply doing a matrix or a heatmap, you can be more visual!
 - Moral matrix
 - <https://lucyxwalker.wordpress.com/2014/02/04/moral-matrix/>



<https://www.informationisbeautifulawards.com/showcase/2620-which-fish-are-okay-to-eat>

Bubble Charts

- As said before, these make more sense when moving (i.e. GapMinder)

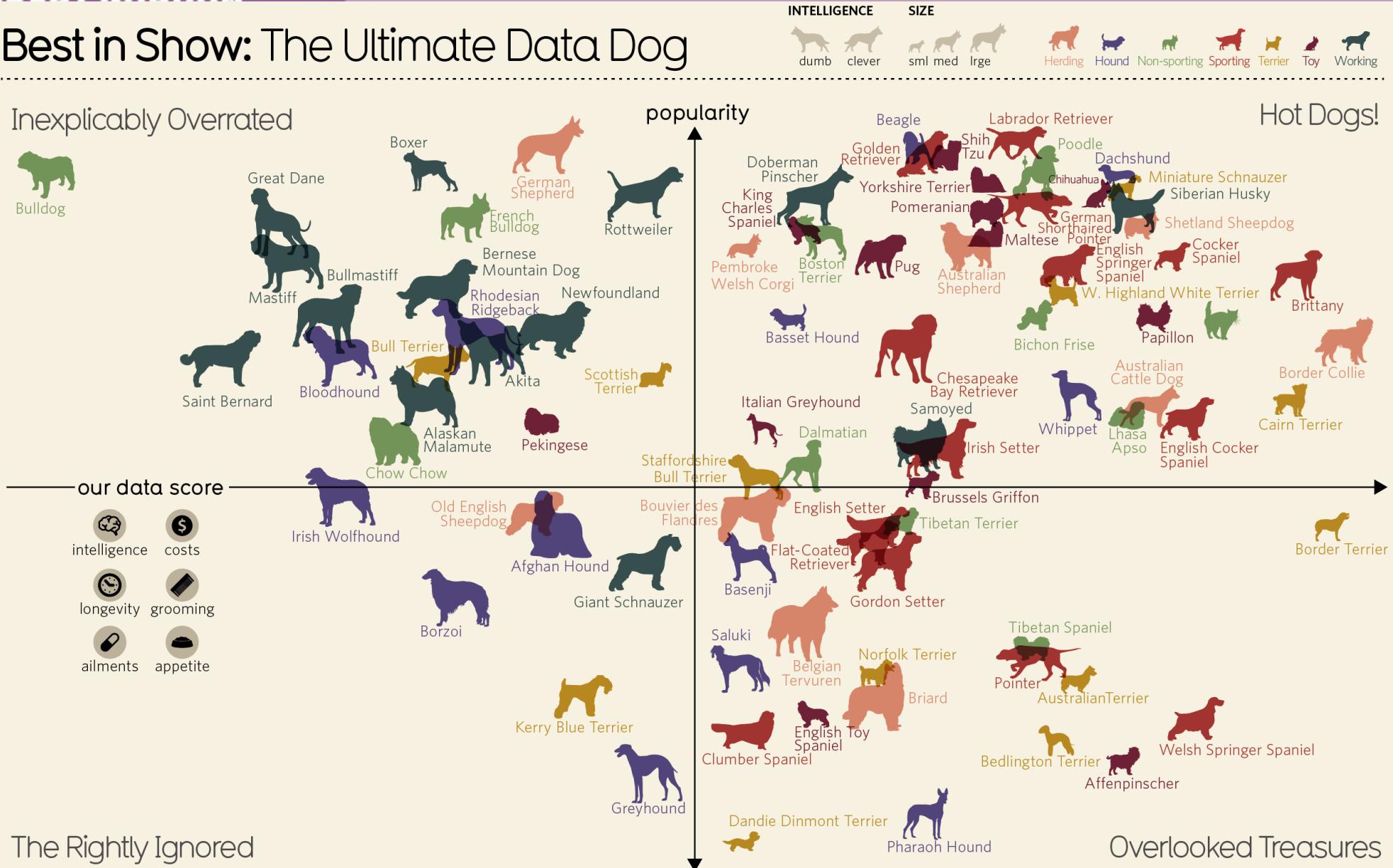


<https://www.gapminder.org/for-teachers/>

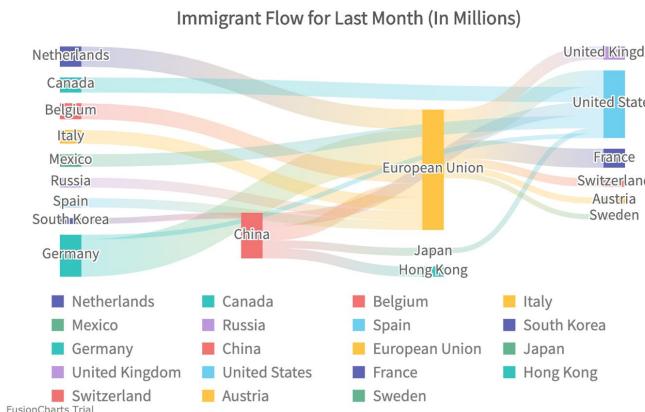
Best in Show: The Ultimate Data Dog

Bu

• Th



Sankey/Chord Diagrams

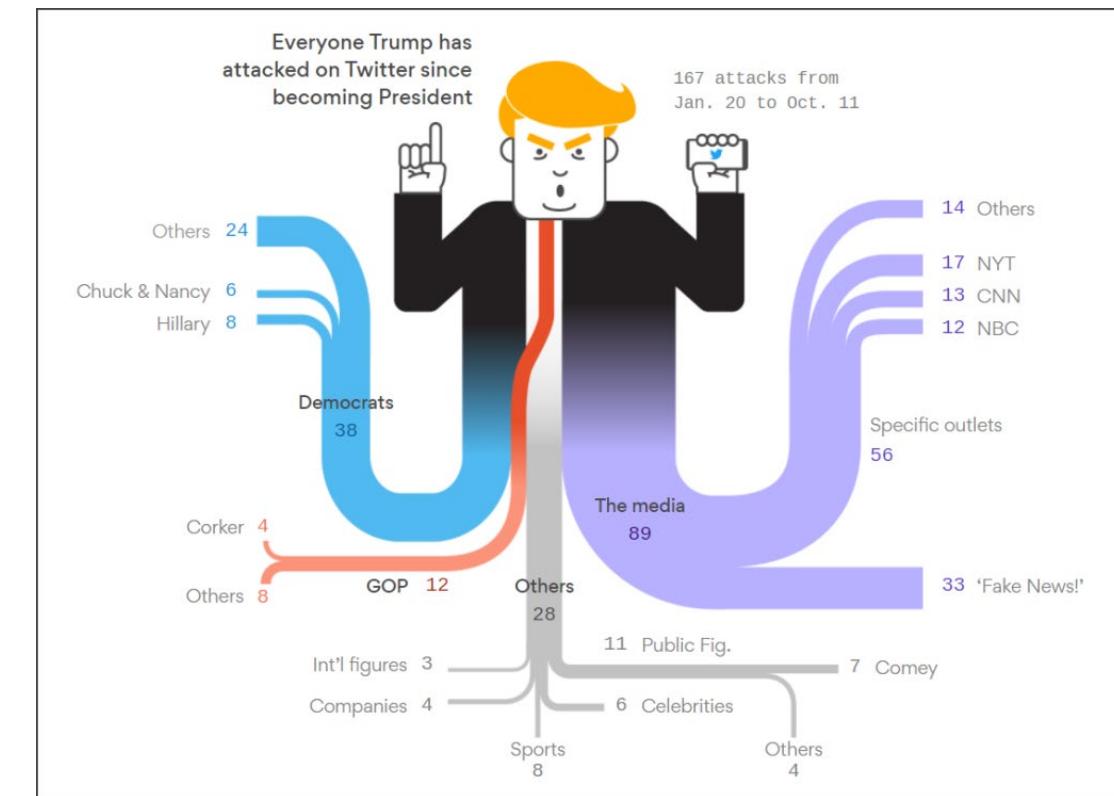


<https://www.fusioncharts.com/dev/chart-guide/standard-charts/sankey-diagram>

- Sometimes they are hard to interpret, but they can be very appealing!

- Timelines

- <https://www.informationisbeautiful.net/visualizations/timelines-time-travel-in-popular-film-and-tv/>



<https://datavizblog.com/2017/10/16/sankey-diagram-who-does-president-trump-attack-the-most-on-twitter/>

Lab: “Running Maps” in Python
