

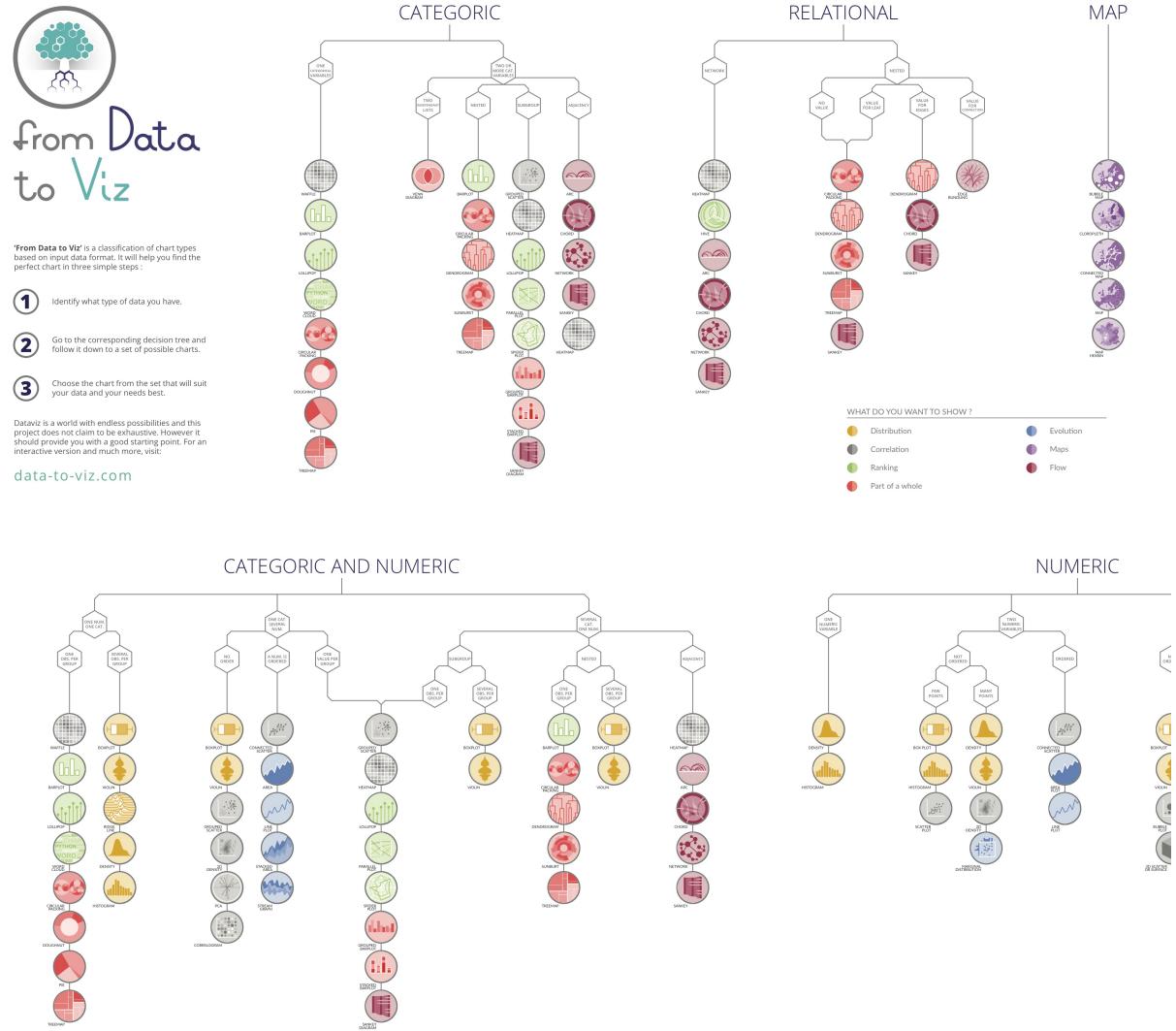
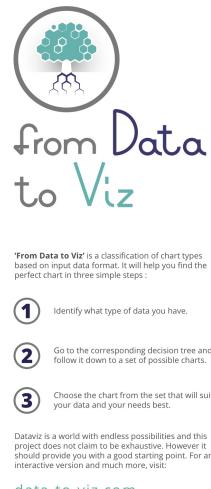


What do my 150 favorite viz have in common?

And can it benefit your next projects?

Yan Holtz | Toulouse | 2022

I ❤️ charts





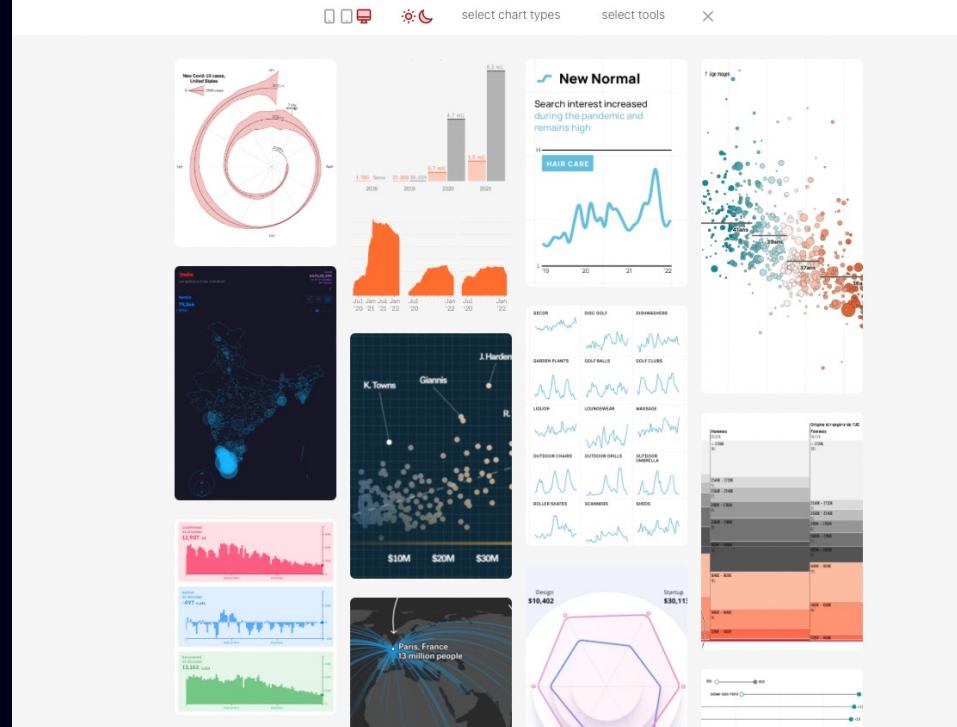
About

RELATED

Dataviz Inspiration



[Dataviz-inspiration.com](#) aims at being the biggest list of chart examples available on the web. It showcases 149 of the most beautiful and impactful dataviz projects I know. The collection is a good place to visit when you're designing a new graph, together with [data-to-viz.com](#) that shares dataviz best practices.

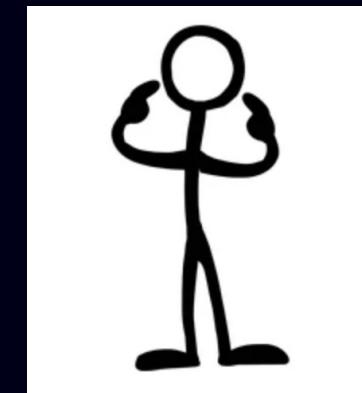
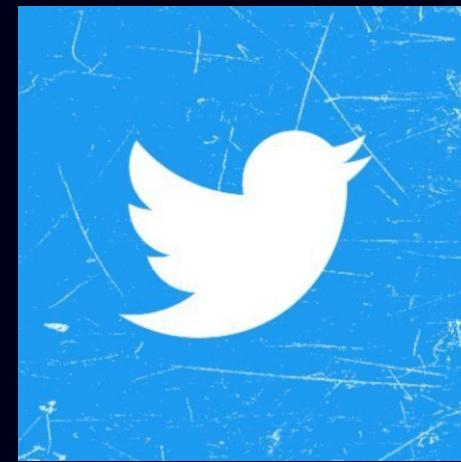


dataviz-inspiration.com



What makes a great viz... great?

**Where do you find
great charts?**



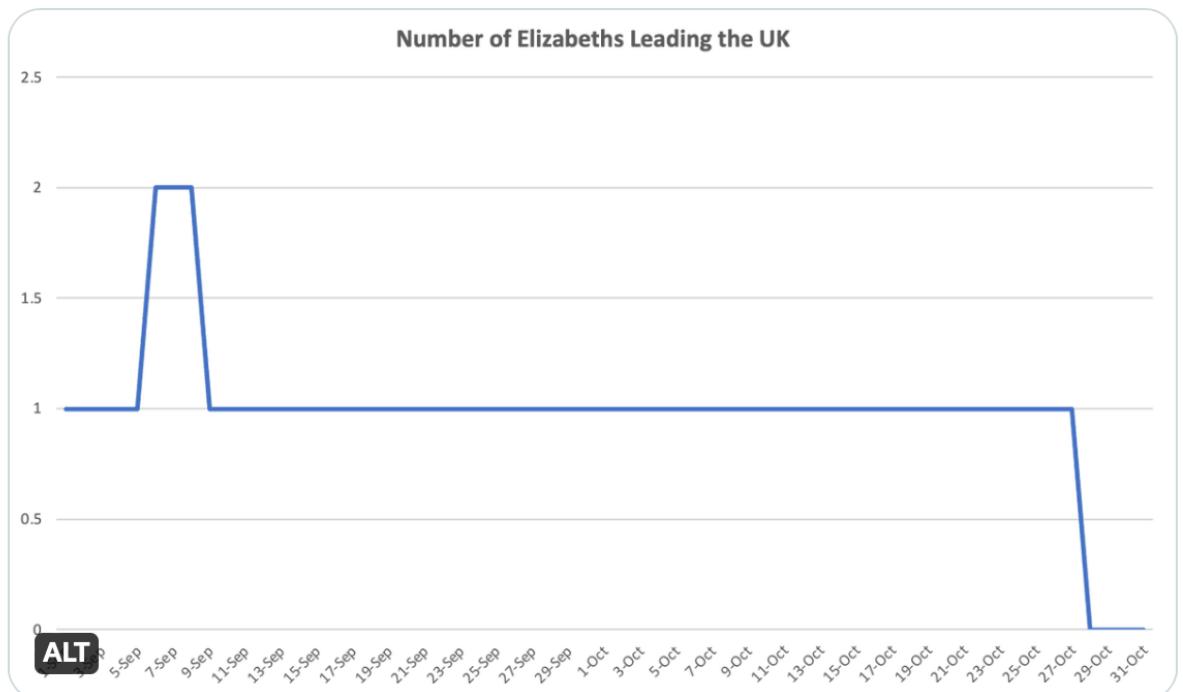
Rating a chart is hard



Brodsky
@a_drewsky

...

data is my passion



3:05 PM · 20 oct. 2022 · Twitter Web App

11,1 k Retweets **318 Tweets cités** **114,6 k J'aime**

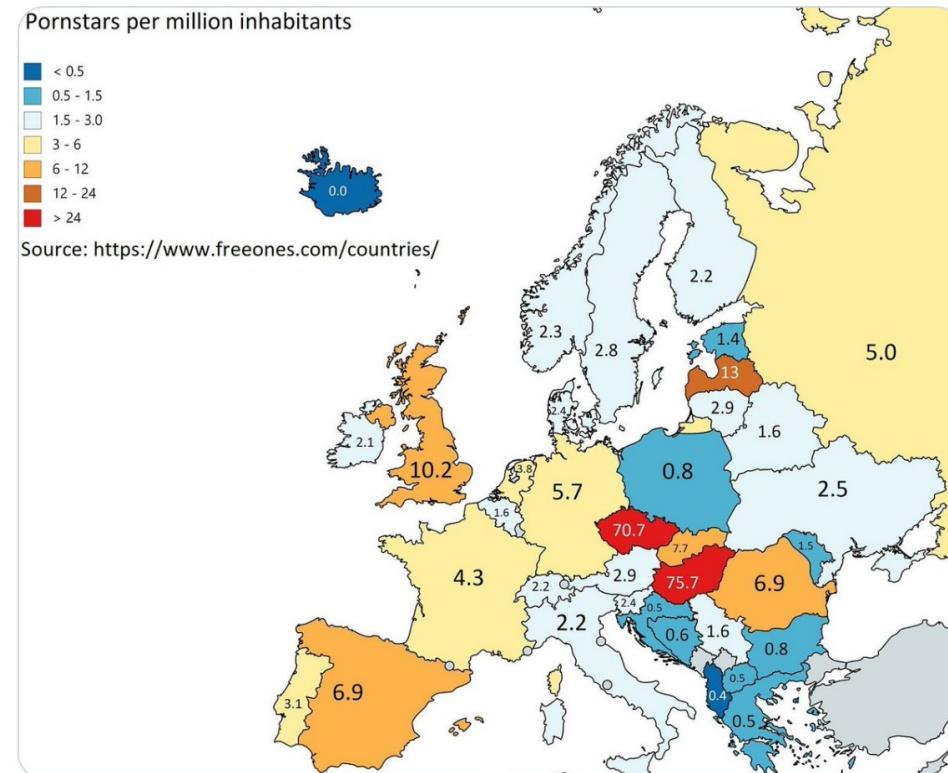


Topic > Chart quality



Terrible Maps
@TerribleMaps

Pornstars per million inhabitants in Europe



7:44 PM · 3 nov. 2022 · Twitter for Android

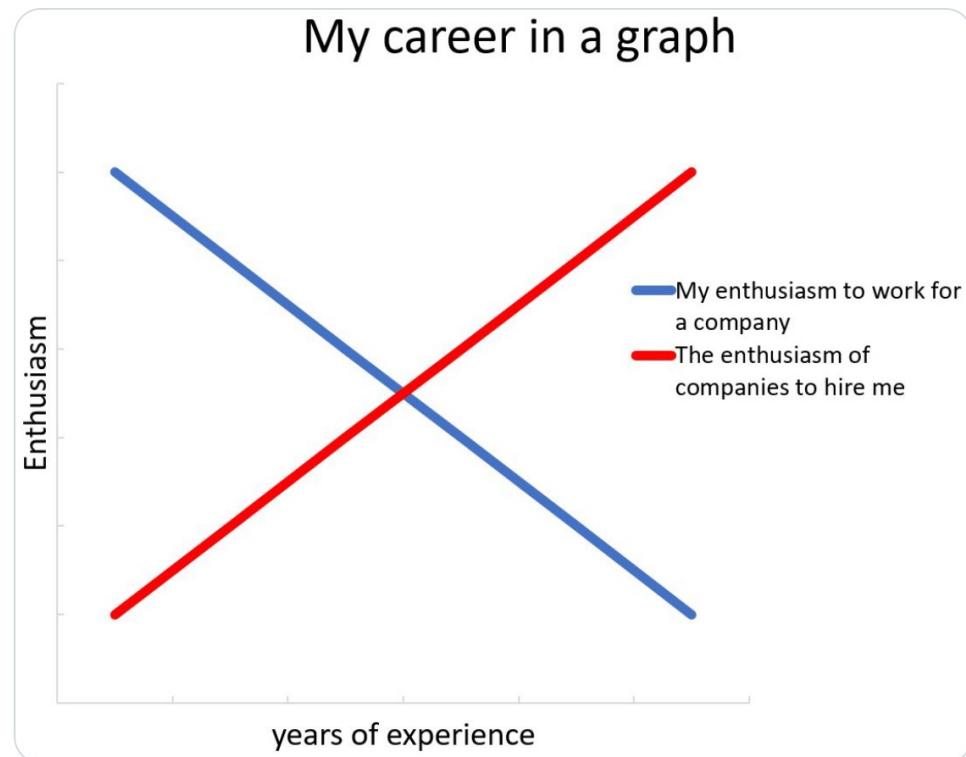
4 080 Retweets **2 094** Tweets cités **77,1 k** J'aime



Shit Product Manager (\$8)
@shitPM

...

The most accurate graph I've ever seen.



3:36 pm · 25 Oct 2022 · Twitter for iPhone

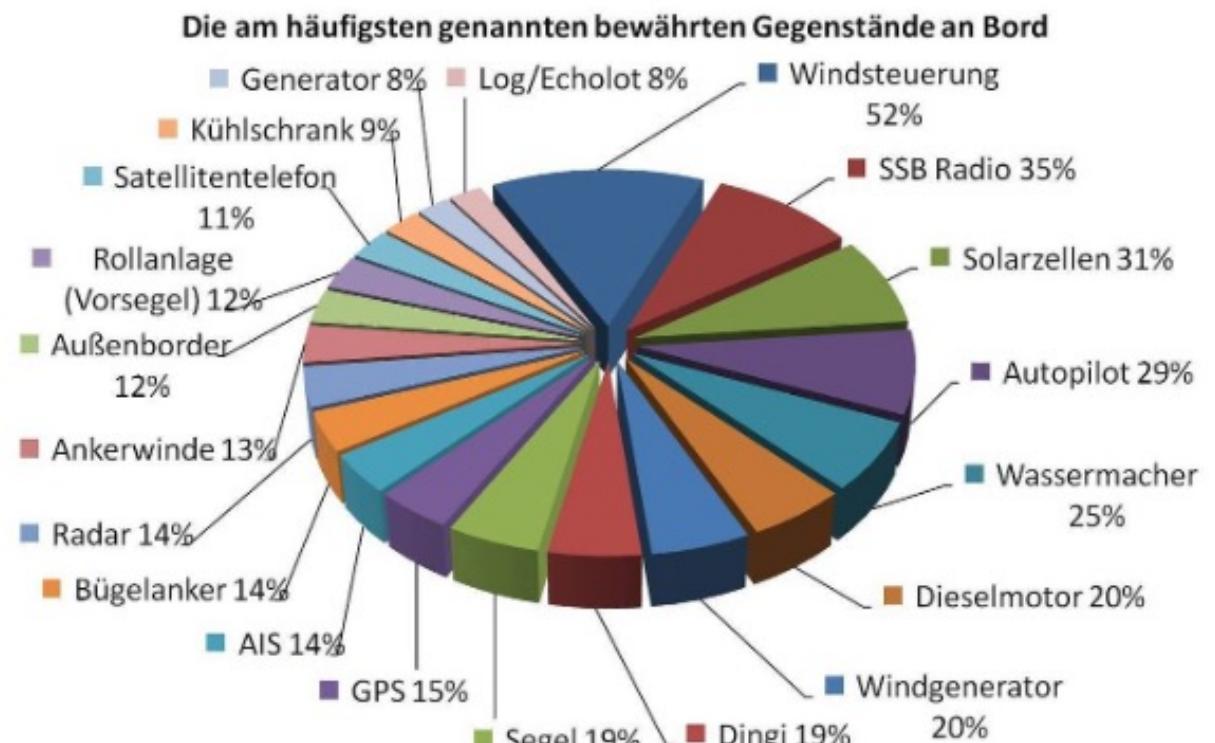
1,070 Retweets **91** Quote Tweets **11.2K** Likes



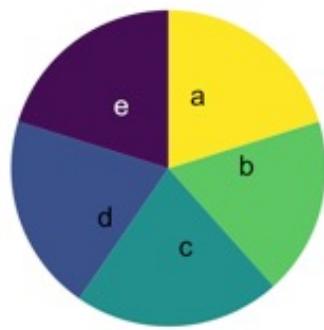
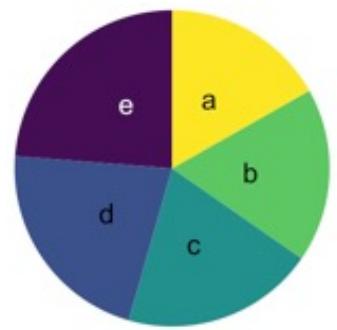
Good viz != Bad viz

Don't cheat!

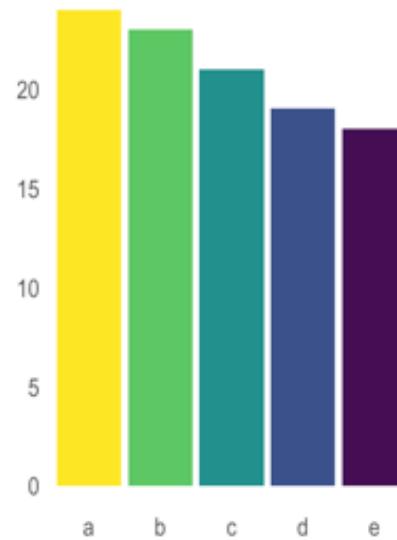
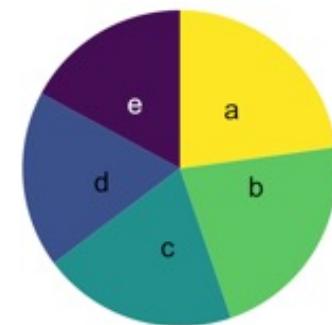
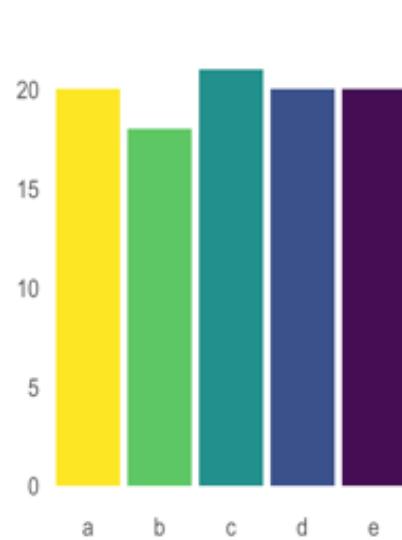
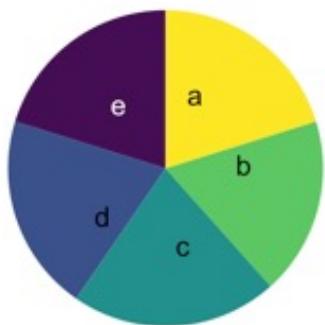
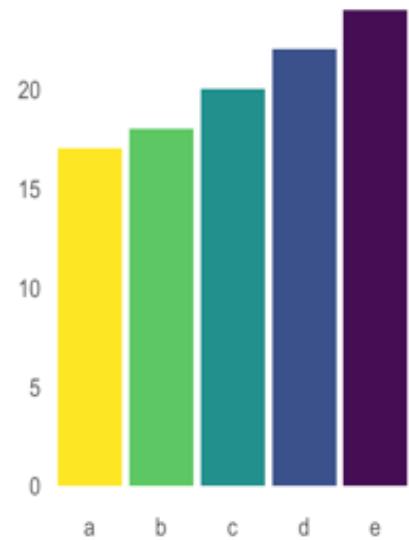
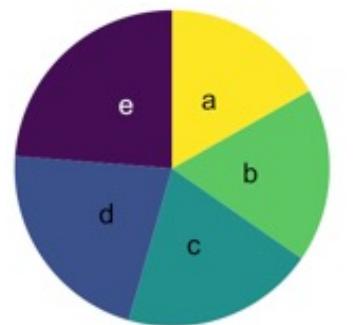
What's wrong here?

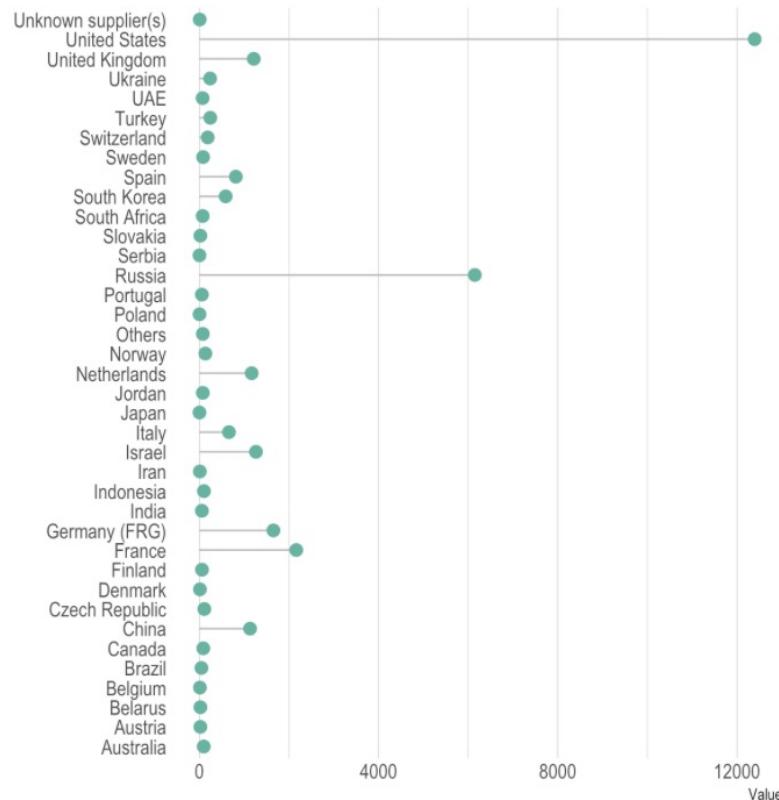


Source: [WTF Visualizations](#)

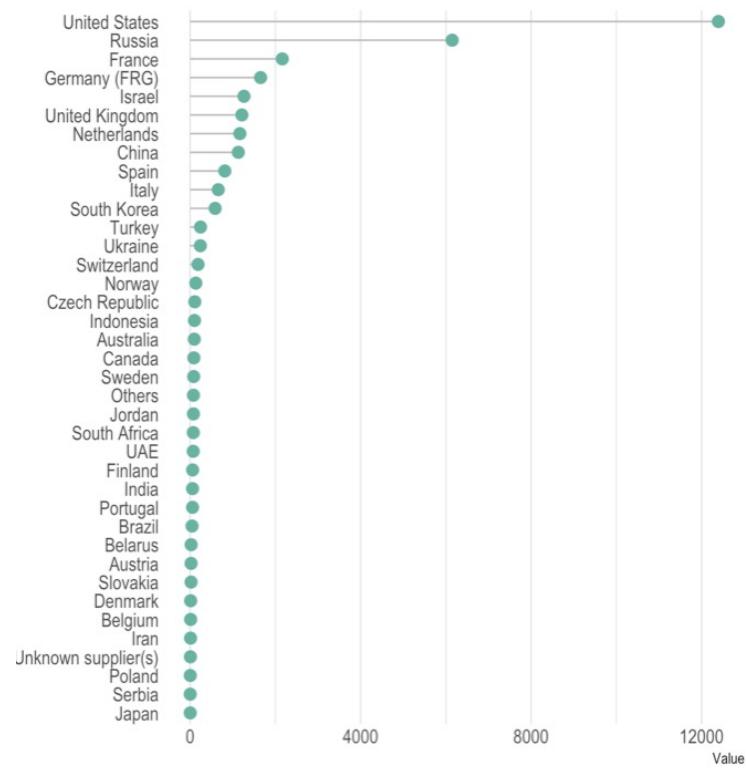
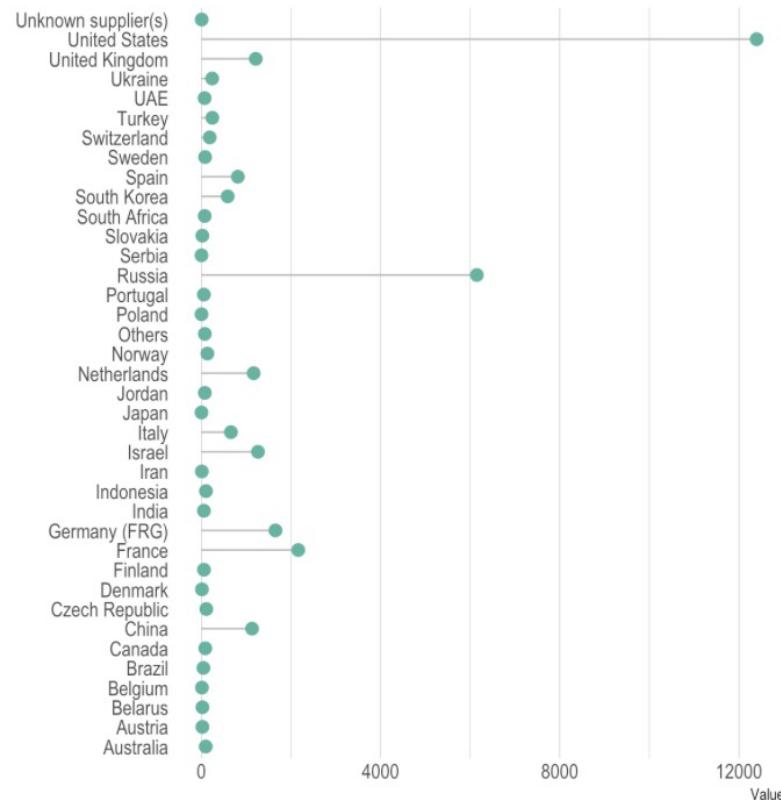


Can you see a pattern?

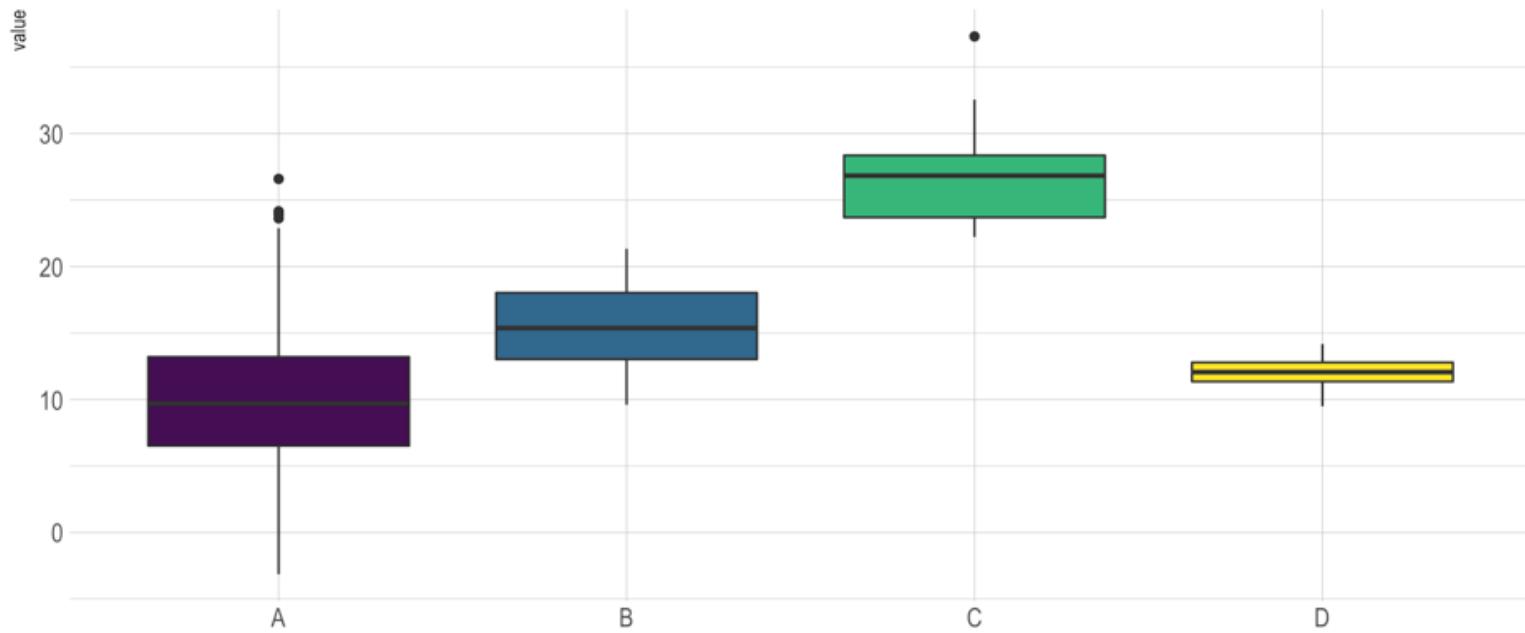


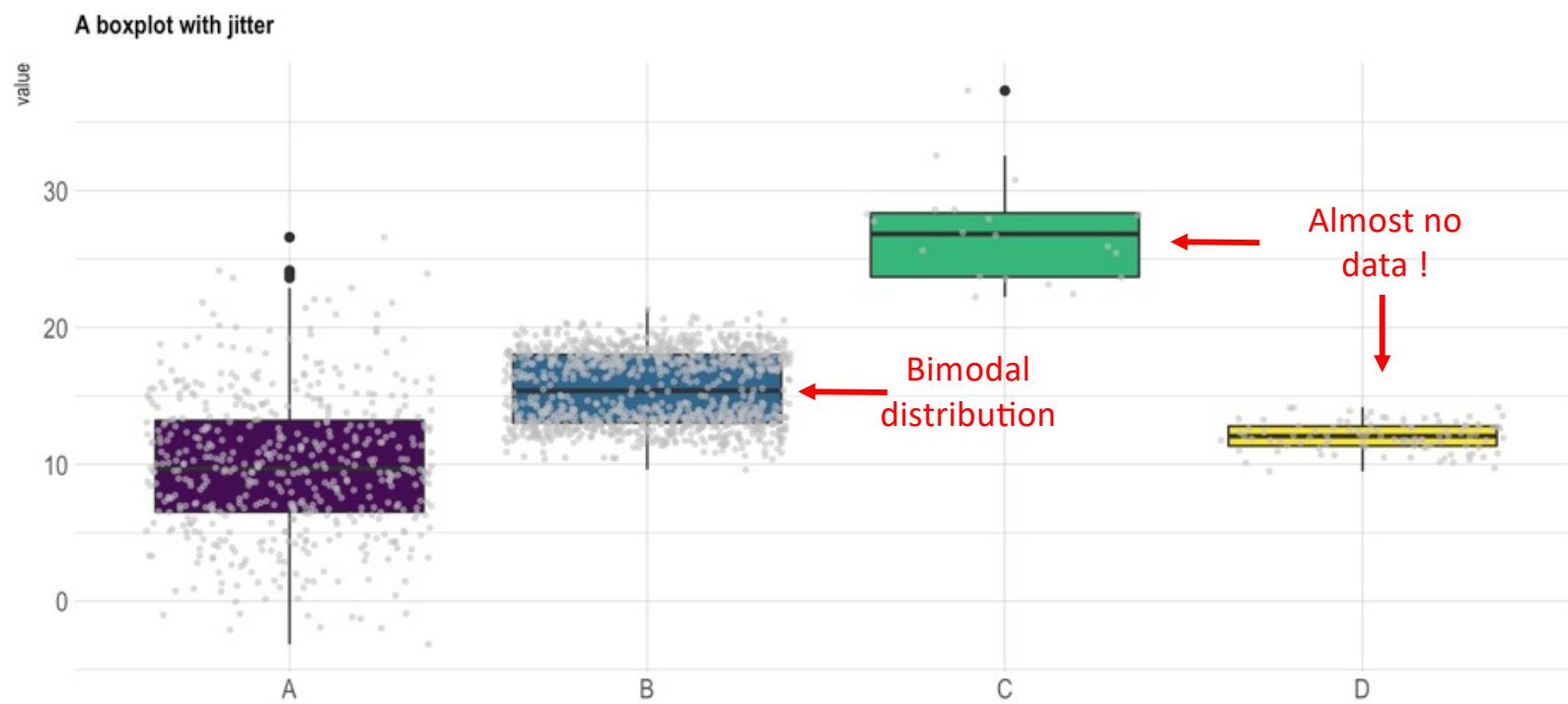


Improvement?

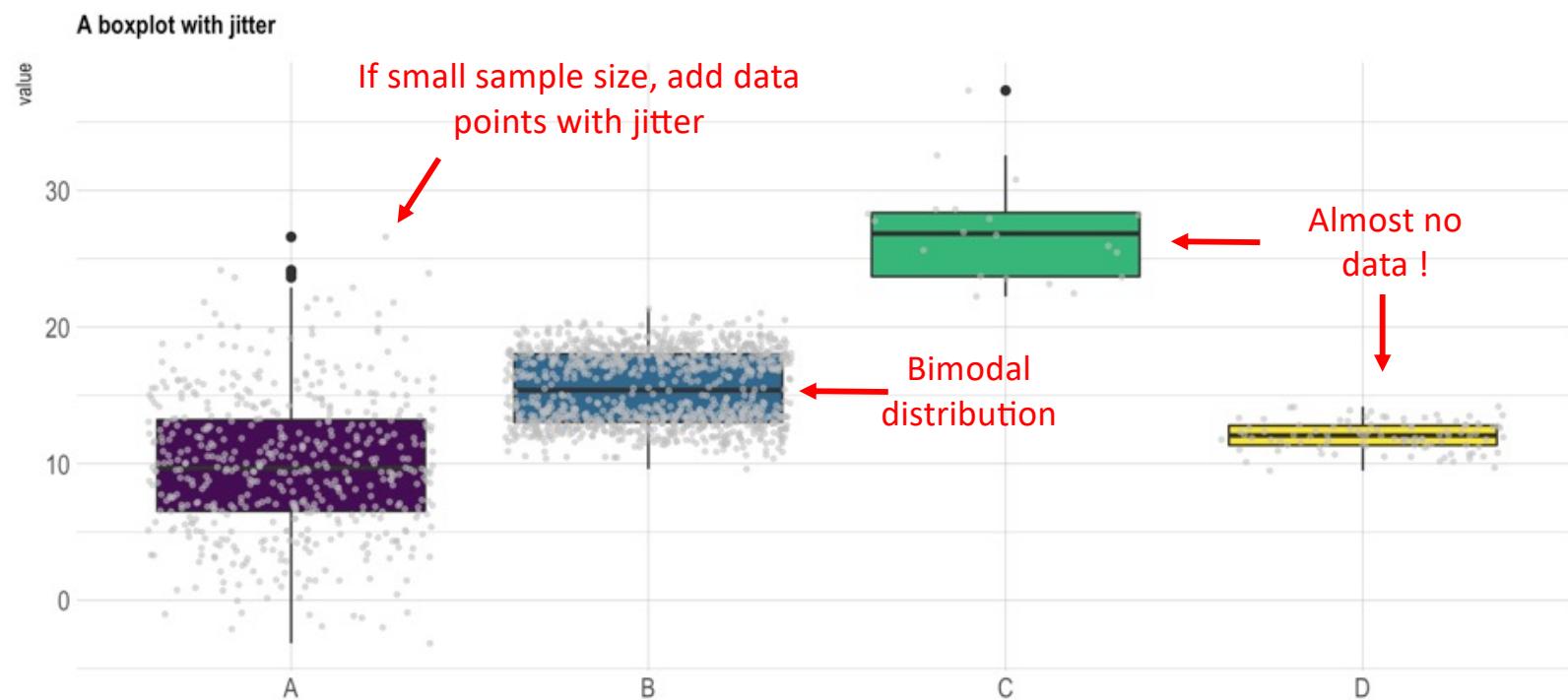


What could go wrong?

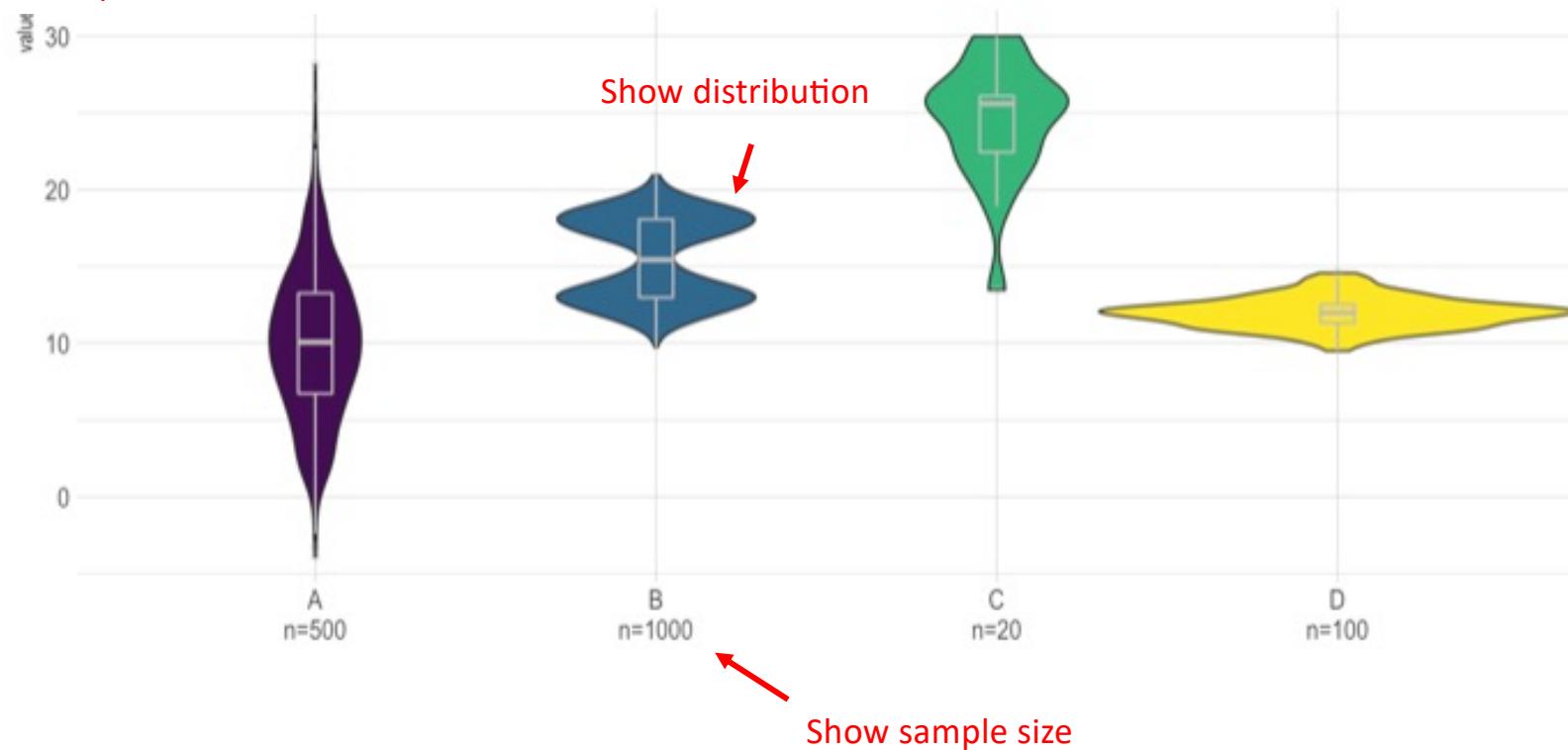




Boxplot = hide information

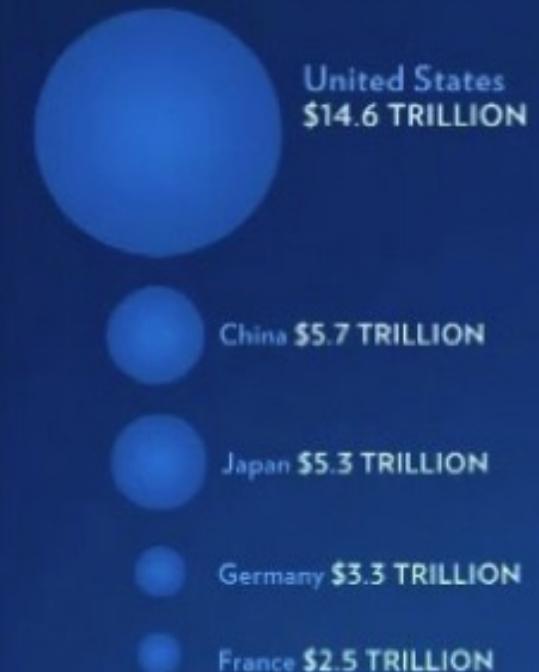


If big sample size, use violin plot

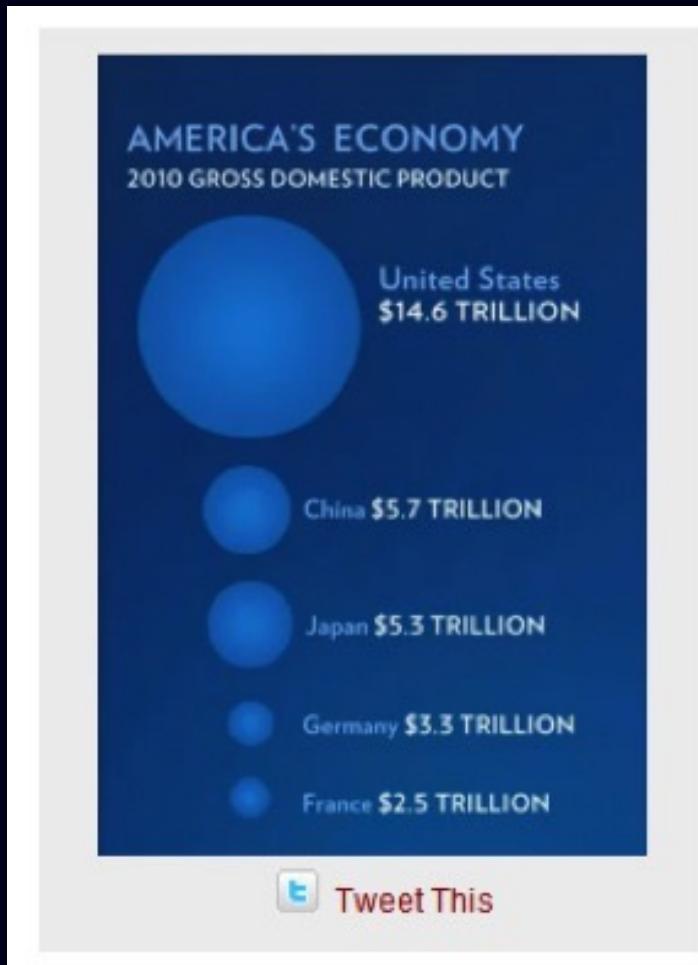




AMERICA'S ECONOMY 2010 GROSS DOMESTIC PRODUCT



Size = radius



Size = area



Data to viz .com

A collection of dataviz caveats



Order your data

When displaying the value of several entities, ordering them makes the graph much more insightful.



To cut or not to cut?

Cutting the Y-axis is one of the most controversial practice in data viz. See why.



The spaghetti chart

A line graph with too many lines becomes unreadable: it is called a spaghetti graph.



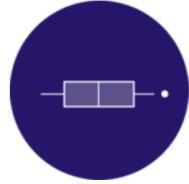
Pie chart

The human eye is bad at reading angles. See how to replace the most criticized chart ever.



Play with histogram bin size

Always try different bin sizes when you build a histogram, it can lead to different insights.



Do boxplots hide information?

Boxplots are a great way to summarize a distribution but hide the sample size and their distribution.



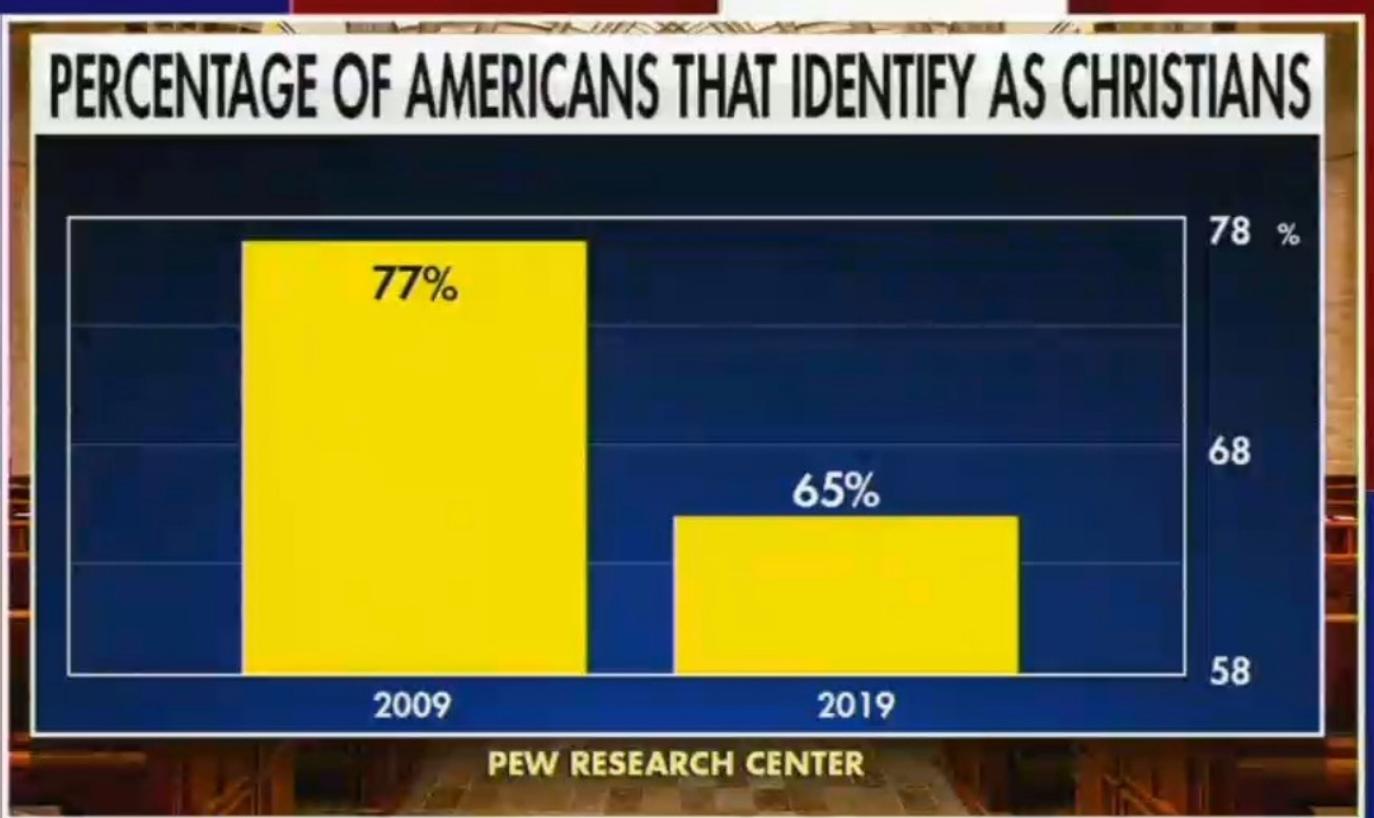
The problem with error bars

Barplots with error bars must be used with great care. See why and how to replace them.



Too many distributions.

If you need to compare the distributions of many variables, don't clutter your graphic.



FOX
NEWS
8:00 ET

WE USED TO BE AN ENTHUSIASTICALLY CHRISTIAN NATION
TUCKER CARLSON TONIGHT



You can break rules

Do what I say, not what I do :)

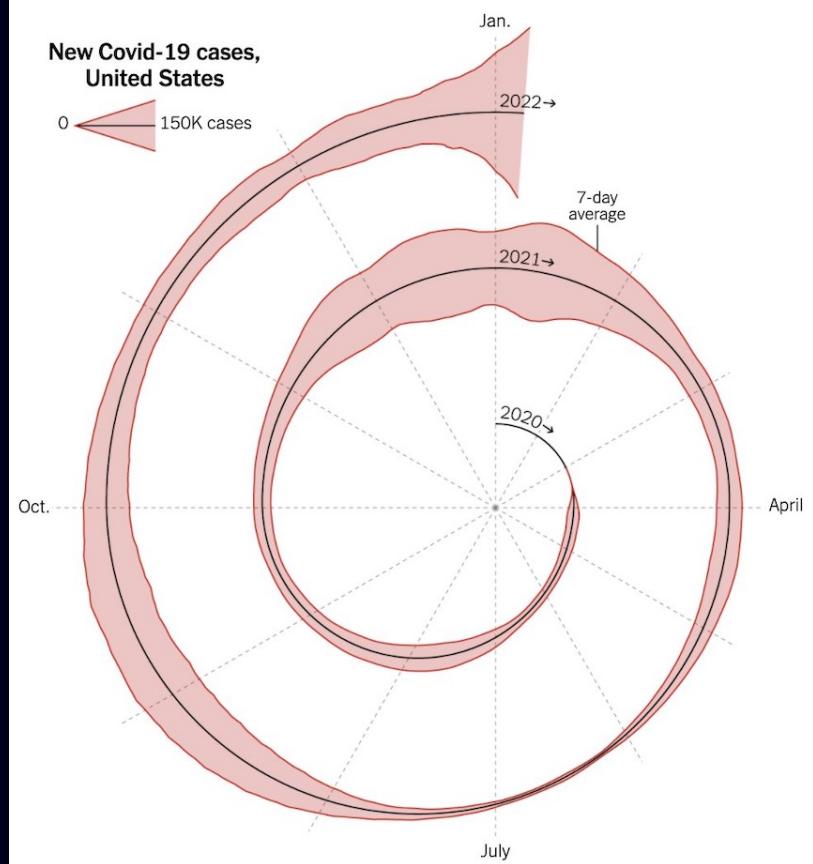
Circular stream graph

Is it appropriate?

[New York Times](#)

Here's When We Expect Omicron to Peak

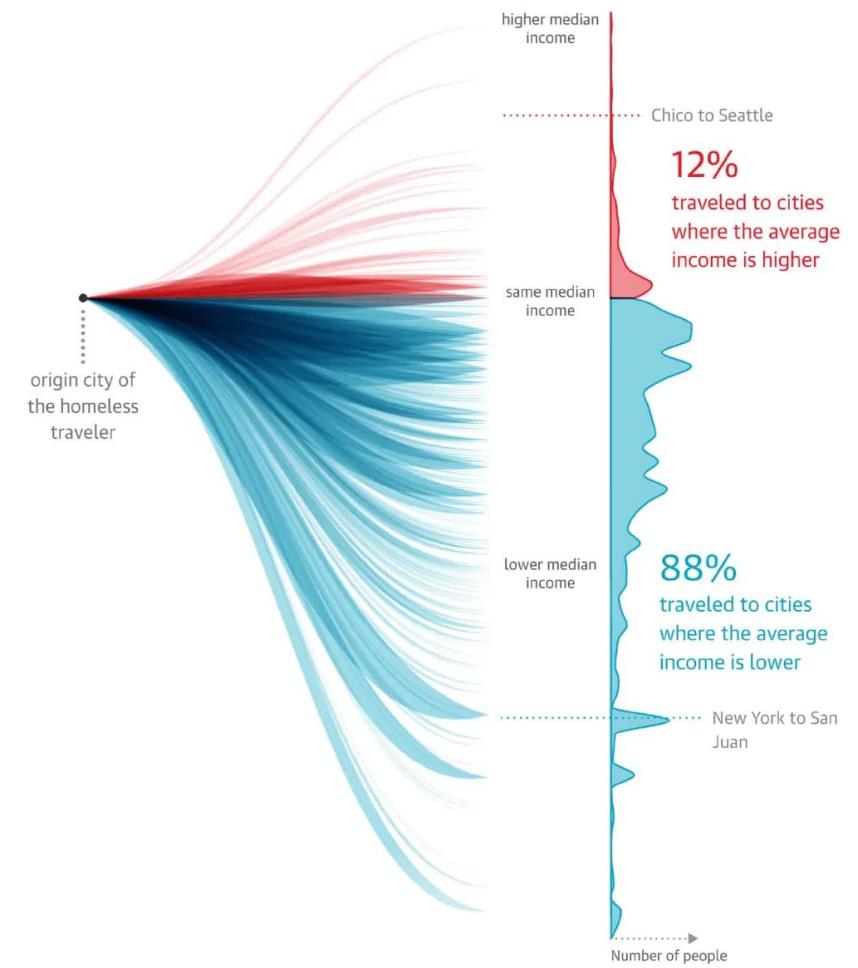
Jan. 6, 2022



Data to ink Ratio?

Left part is useless, but catch your eyes

Most ticket recipients are relocated to places with a lower median income



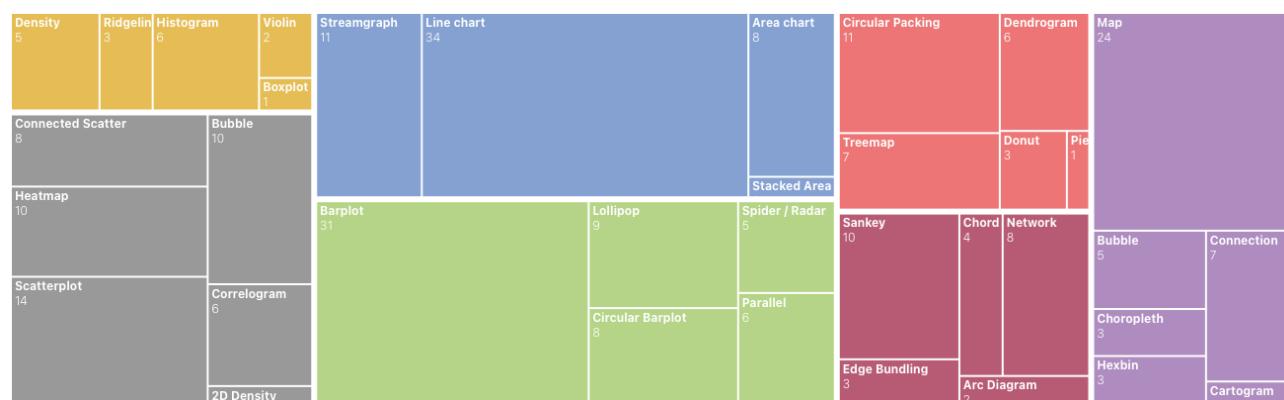


Master the chart diversity

Diversity is high

Knowledge is low

Data to viz



Distribution



Correlation



Evolution



Ranking



PartOfAWhole



Flow



Map

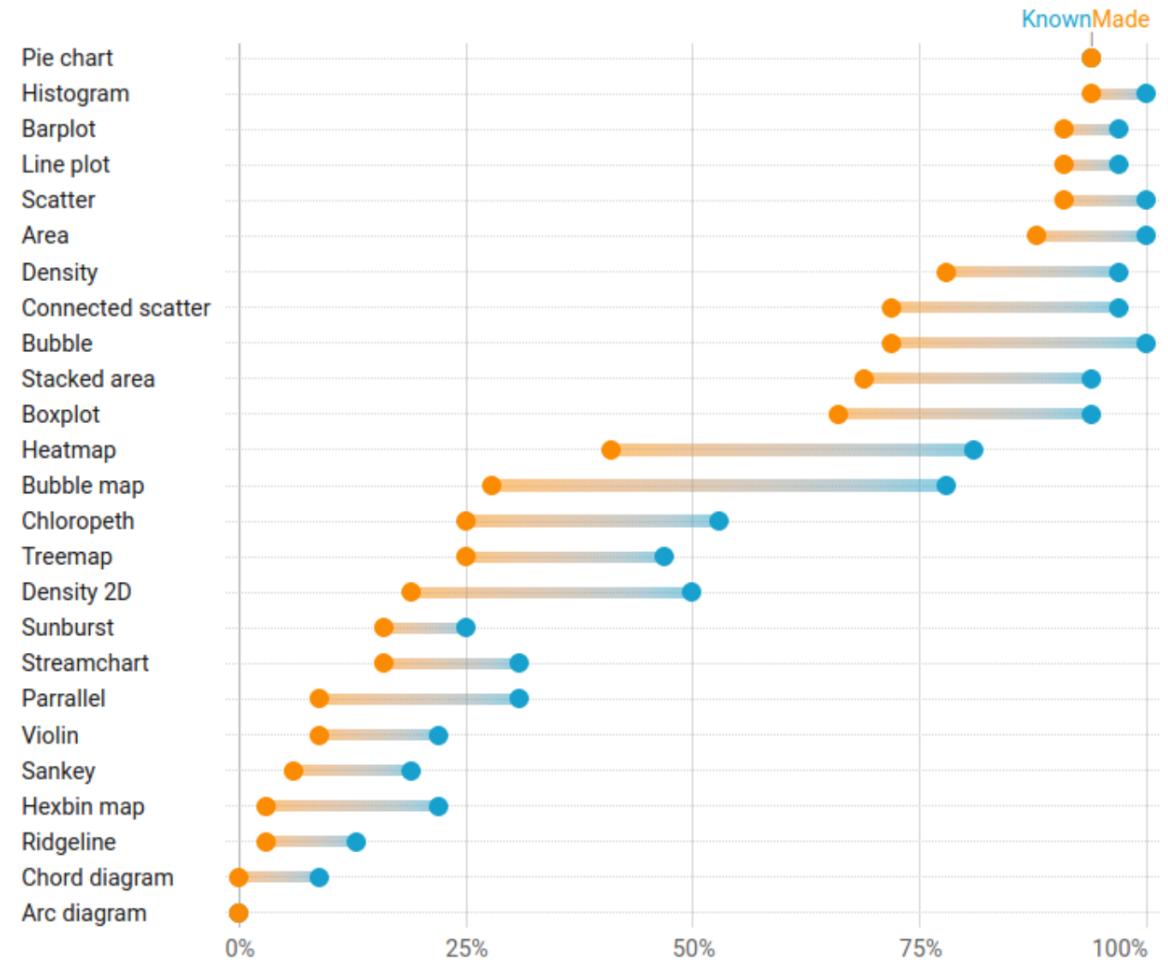


Diversity is high

Knowledge is low

Charts you made and charts you know 18/12

Dataviz training session 18/12





from Data to Viz

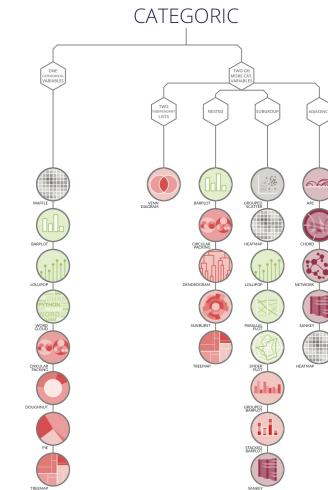
'From Data to Viz' is a classification of chart types based on input data format. It will help you find the perfect chart in three simple steps :

- ① Identify what type of data you have.
- ② Go to the corresponding decision tree and follow it down to a set of possible charts.
- ③ Choose the chart from the set that will suit your data and your needs best.

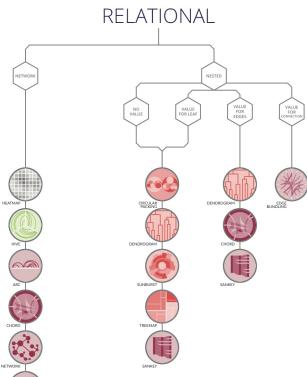
Dataviz is a world with endless possibilities and this project does not claim to be exhaustive. However it should provide you with a good starting point. For an interactive version and much more, visit:

data-to-viz.com

CATEGORIC



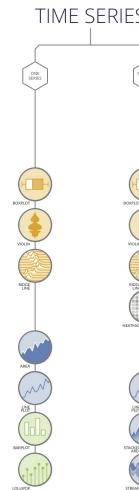
RELATIONAL



MAP



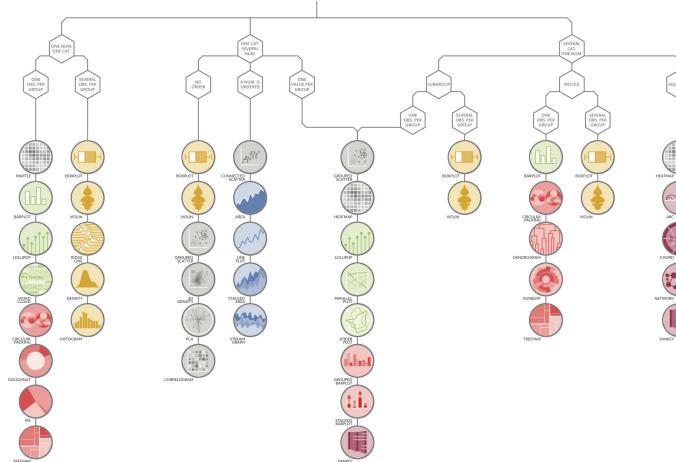
TIME SERIES



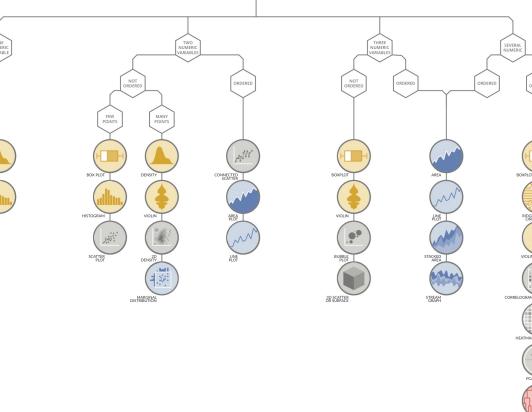
WHAT DO YOU WANT TO SHOW ?

- Evolution
- Correlation
- Maps
- Ranking
- Flow
- Part of a whole

CATEGORIC AND NUMERIC

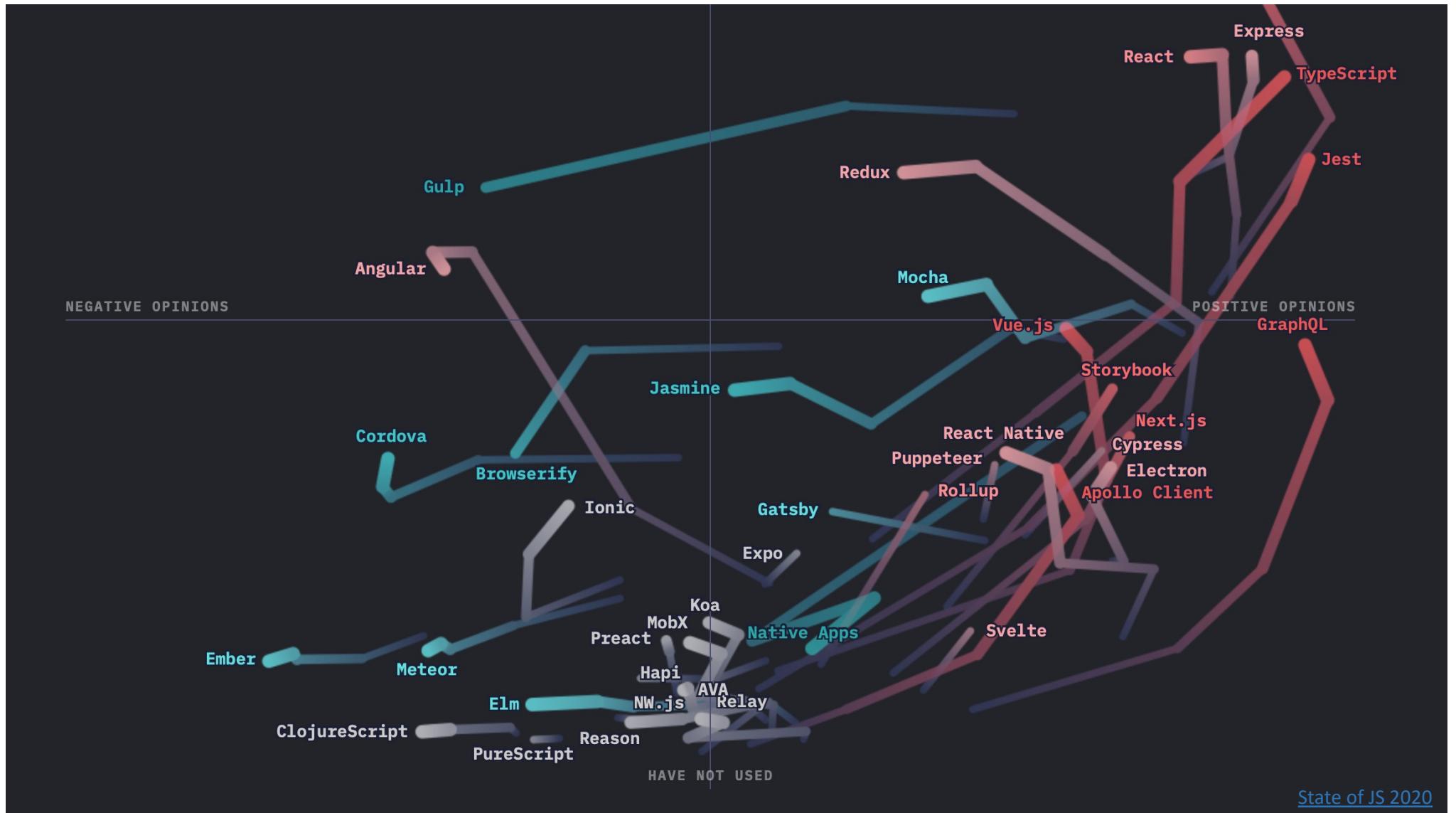


NUMERIC



How would you plot this?

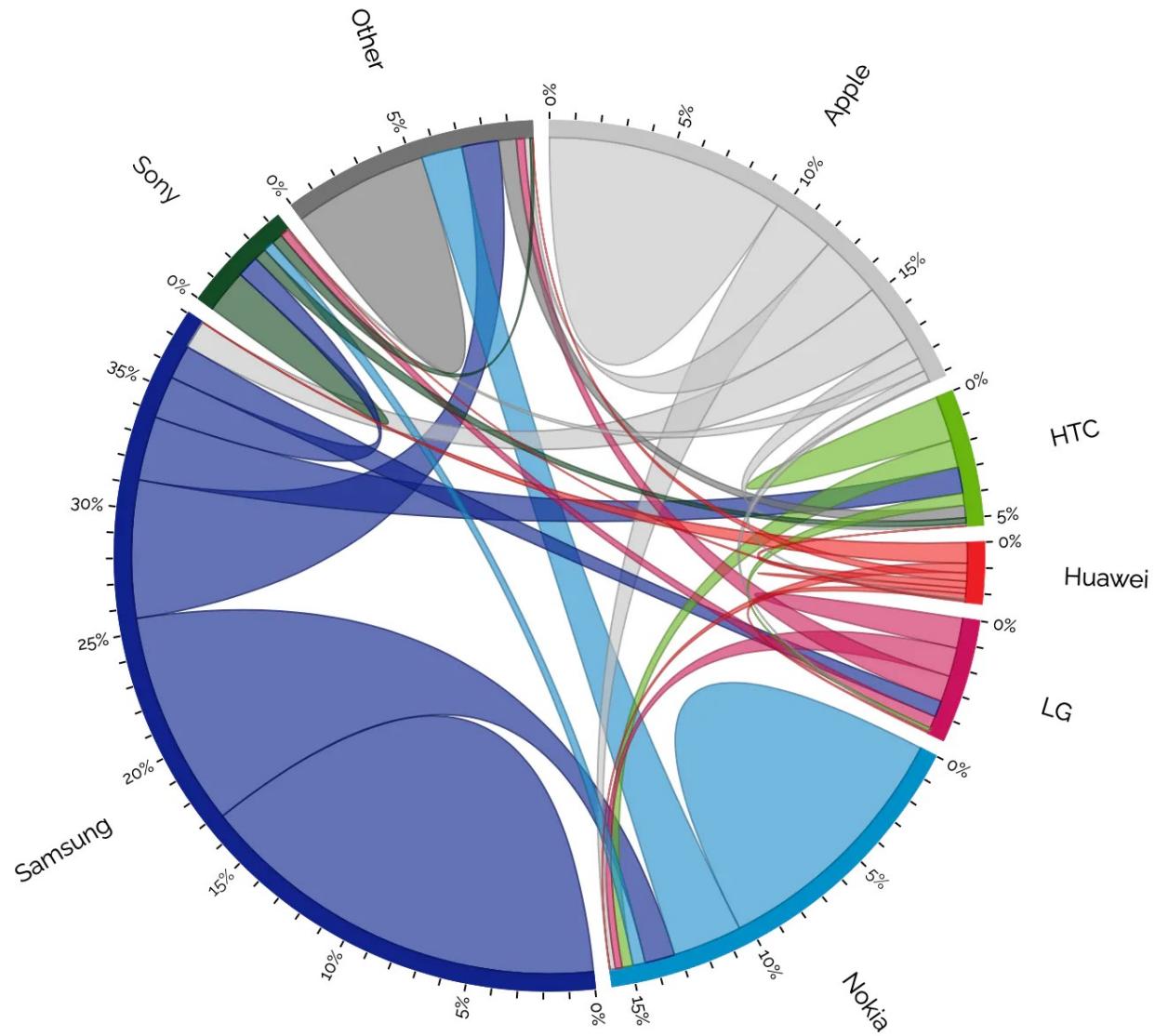
Tool	Year	Have use	Opinion
react	2016	23%	8
react	2017	26%	9
react	2018	43%	9.3
react	2019	76%	9.1
svelte	2017	23%	9
...



Know your audience

Or teach them

Nadieh Bremer





Beyond chart types

Circular barplot with variable width?

Nobody knows...

Carbon Emissions PER-CAPITA BY COUNTRY

Measuring the total carbon emissions doesn't always paint the most accurate picture of a country's contribution, if their population isn't considered.

For example, even though China is the highest emitter of CO₂, the average American is responsible for producing 14.4 tonnes of CO₂ per person, compared to 7.1 tonnes for a Chinese citizen.

Here's a look at the biggest per-capita carbon emitters in the world:



Unequal global distribution of wealth plays a factor in carbon emissions. Developed countries like **Qatar** emit 31t CO₂/yr, while that of developing countries in **Africa** can be as low as 0.7t CO₂/yr.

*1 Middle East A
Bahrain, Oman, Kuwait, Qatar, United Arab Emirates

*2 Middle East B
Israel, Jordan, Lebanon, Syria, Yemen

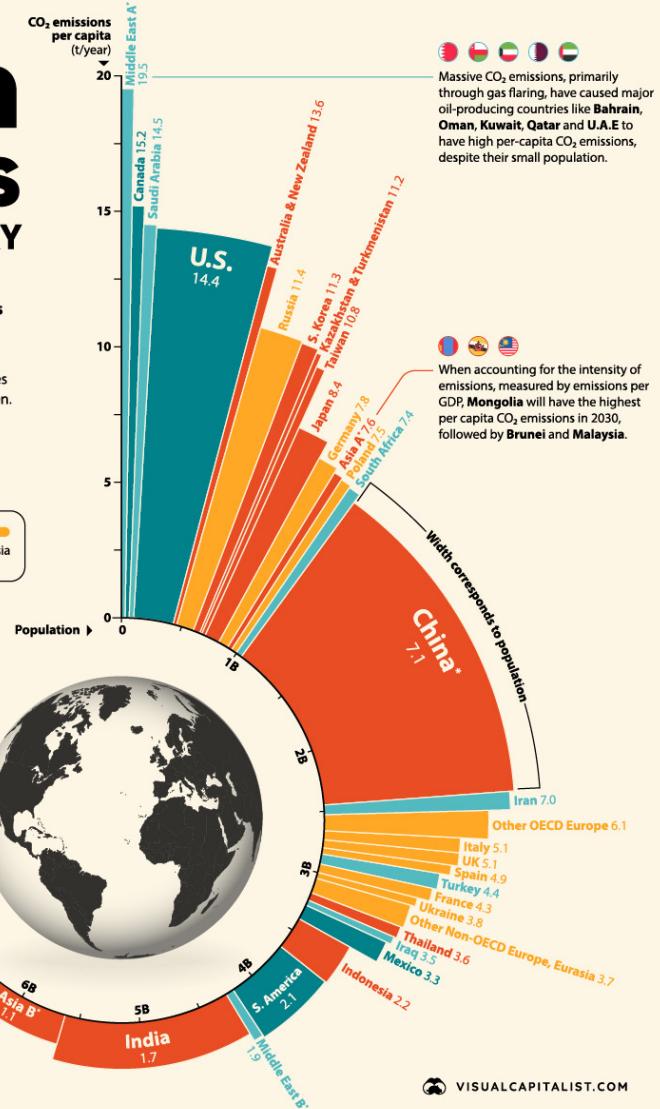
*3 Asia A
Brunei, Malaysia, Mongolia, Singapore

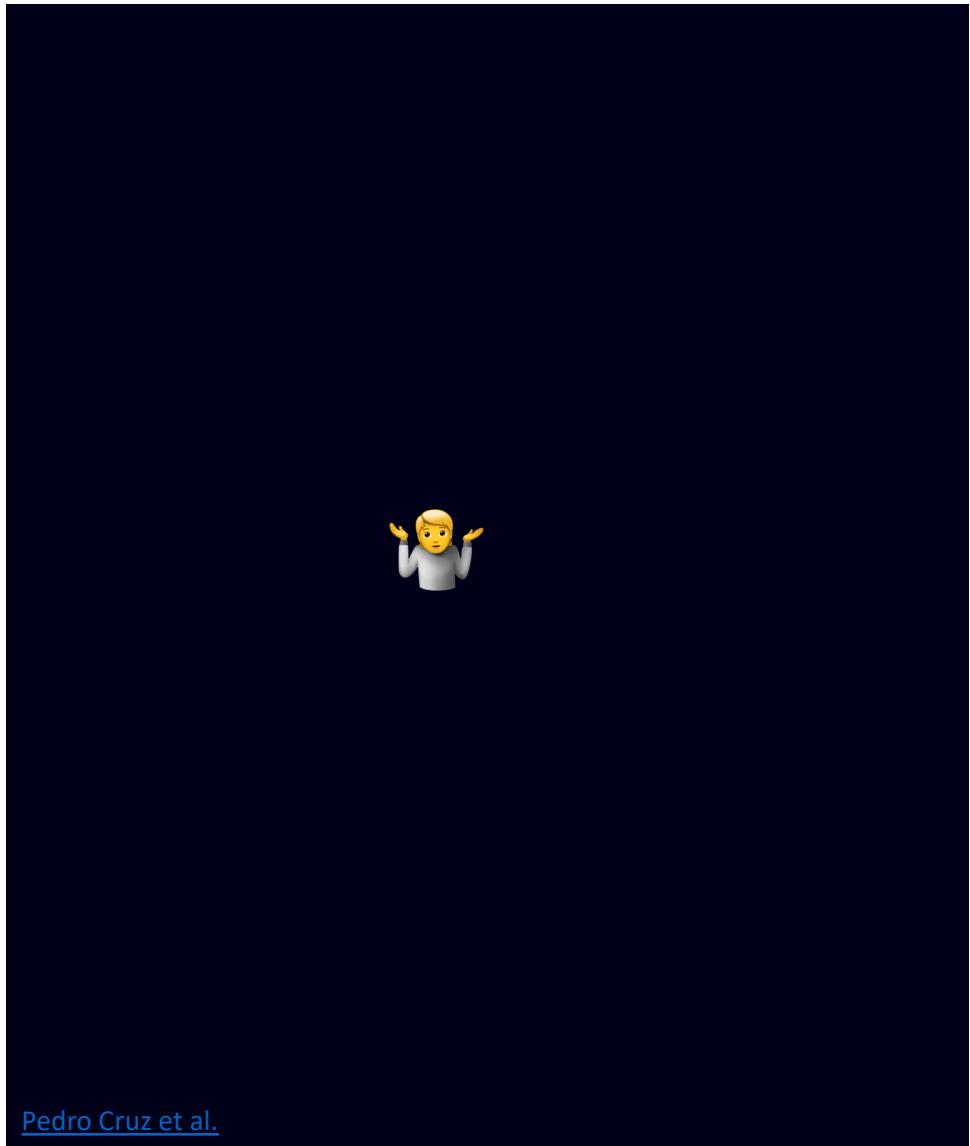
*4 Asia B
Asia without Asia A, China, India, Thailand, Taiwan, Indonesia, S. Korea or Japan

*5 China
China, Hong Kong

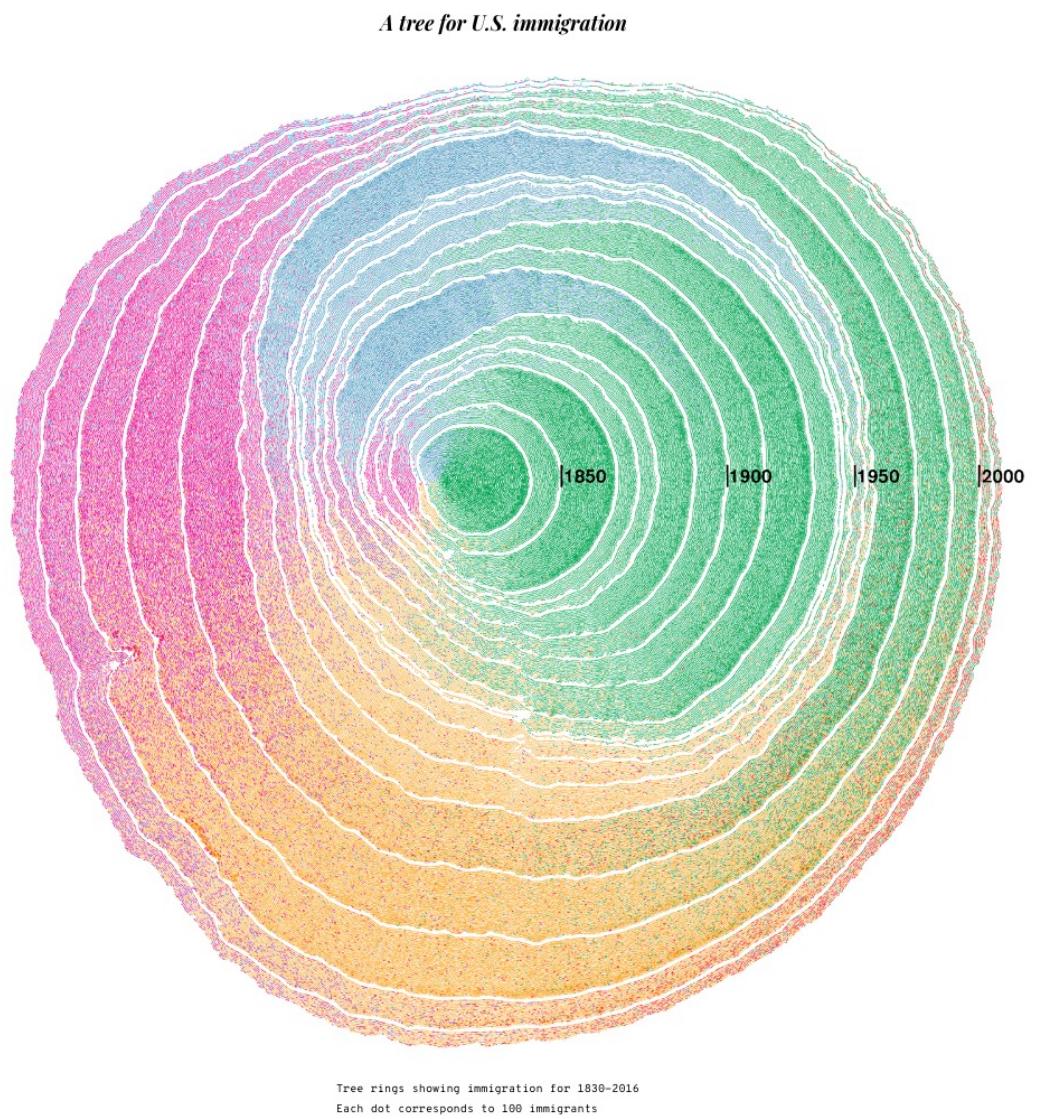
The CO₂ emission values are based on estimates of the source chart. There may be a negligible difference between the ones provided here and the source data.

SOURCE: AQAL GROUP, IEA (2021)



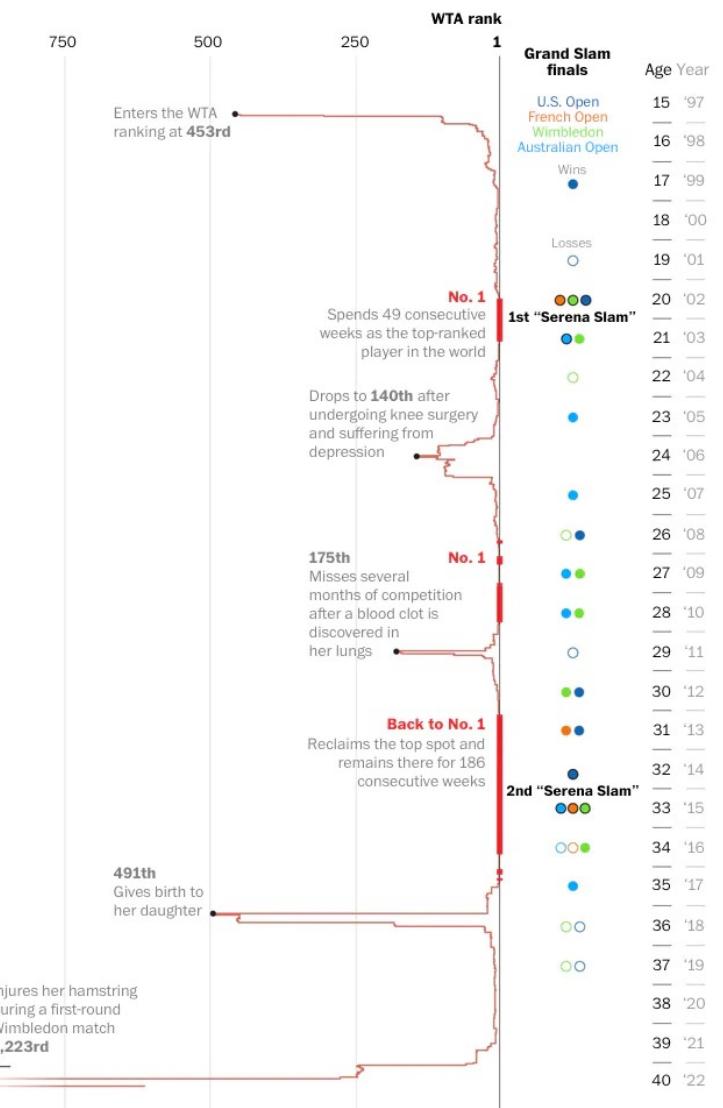


[Pedro Cruz et al.](#)





Annotation is key

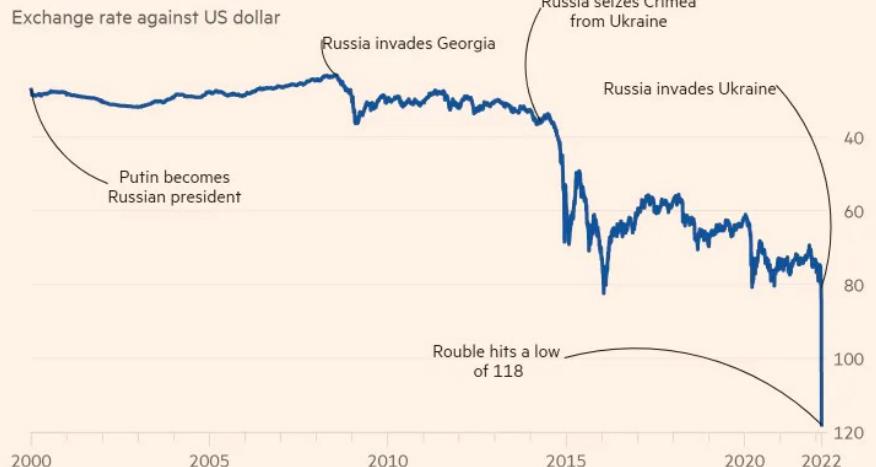


Tell the story ON the chart

Reader does not want to jump from text to chart and reverse

Rouble tumbles to record low

Exchange rate against US dollar



Scale inverted
Source: Refinitiv
© FT

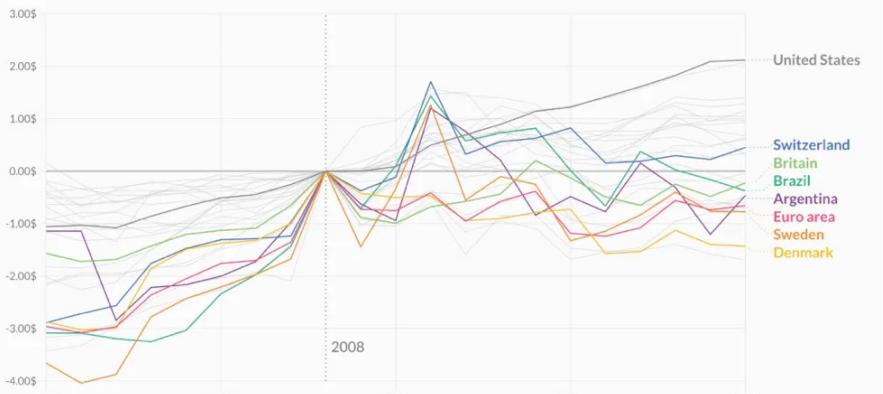
Tell the story ON the chart

Reader does not want to jump from text to chart and reverse

Cedric Scherer

Compared to the financial crisis in 2008, how much more or less do you have to pay for a Big Mac today?

The index chart visualizes the price changes (in USD) of a Big Mac based on a 2008 as index year. The Big Mac Index is published by The Economist as an informal way to provide a test of the extent to which market exchange rates result in goods costing the same in different countries. It seeks to make exchange-rate theory a bit more digestible and takes its name from the Big Mac, a hamburger sold at McDonald's restaurants.



Visualization by Cédric Scherer • Data by The Economist • The index chart shows the 27 countries that provide Big mac prices for all years from 2000 to 2020. In case a country was reported twice per year, the mean value was visualized.

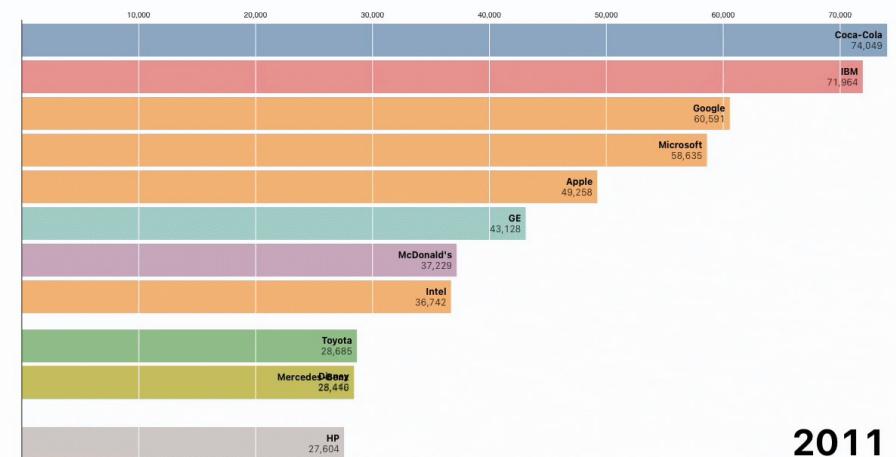


Interactivity?

Use it with care

Interactivity != Animation

Animation is like salt, too much of it spoils the dish



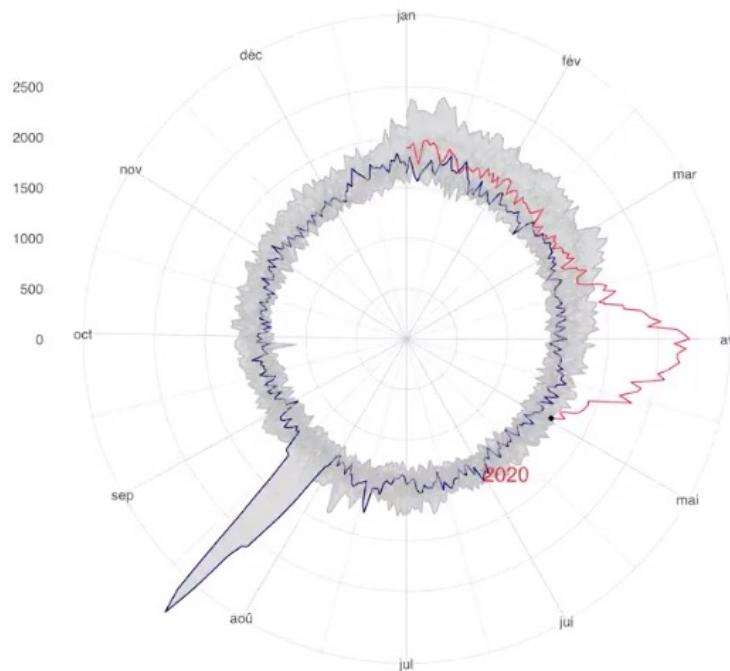


coulmont
@coulmont

Nombre quotidien de décès en France, 2001-2020, en version animée, coordonnées polaires.

Nombre quotidien de décès en France, 2001-2020

En rouge, l'année 2020, en bleu 2003, en gris les années 2001 à 2019.

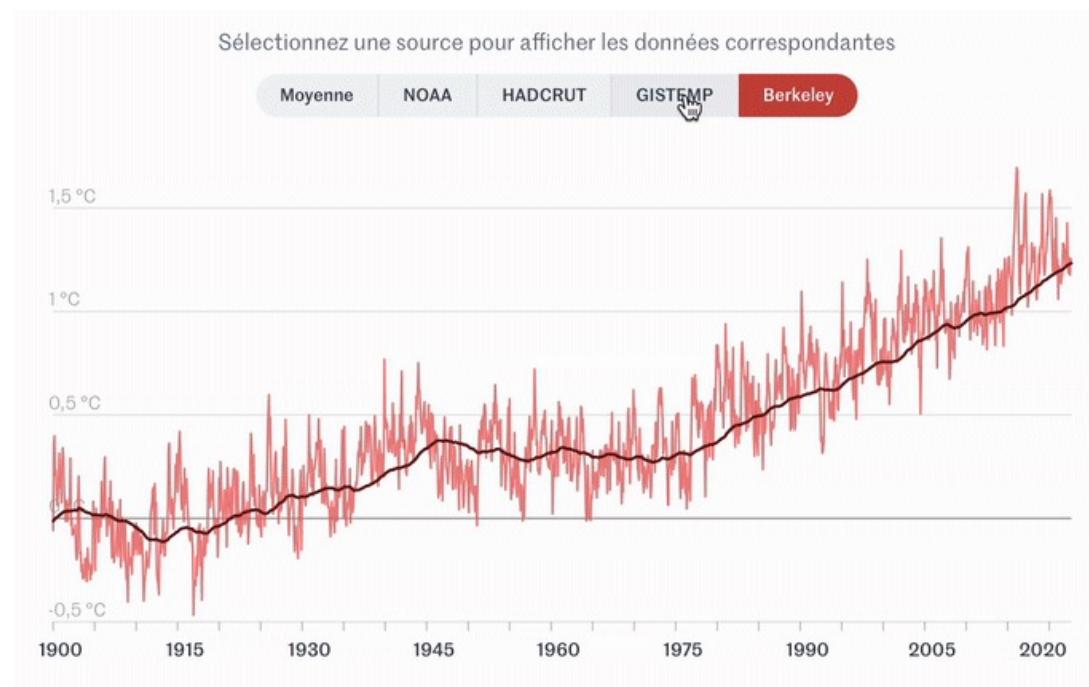


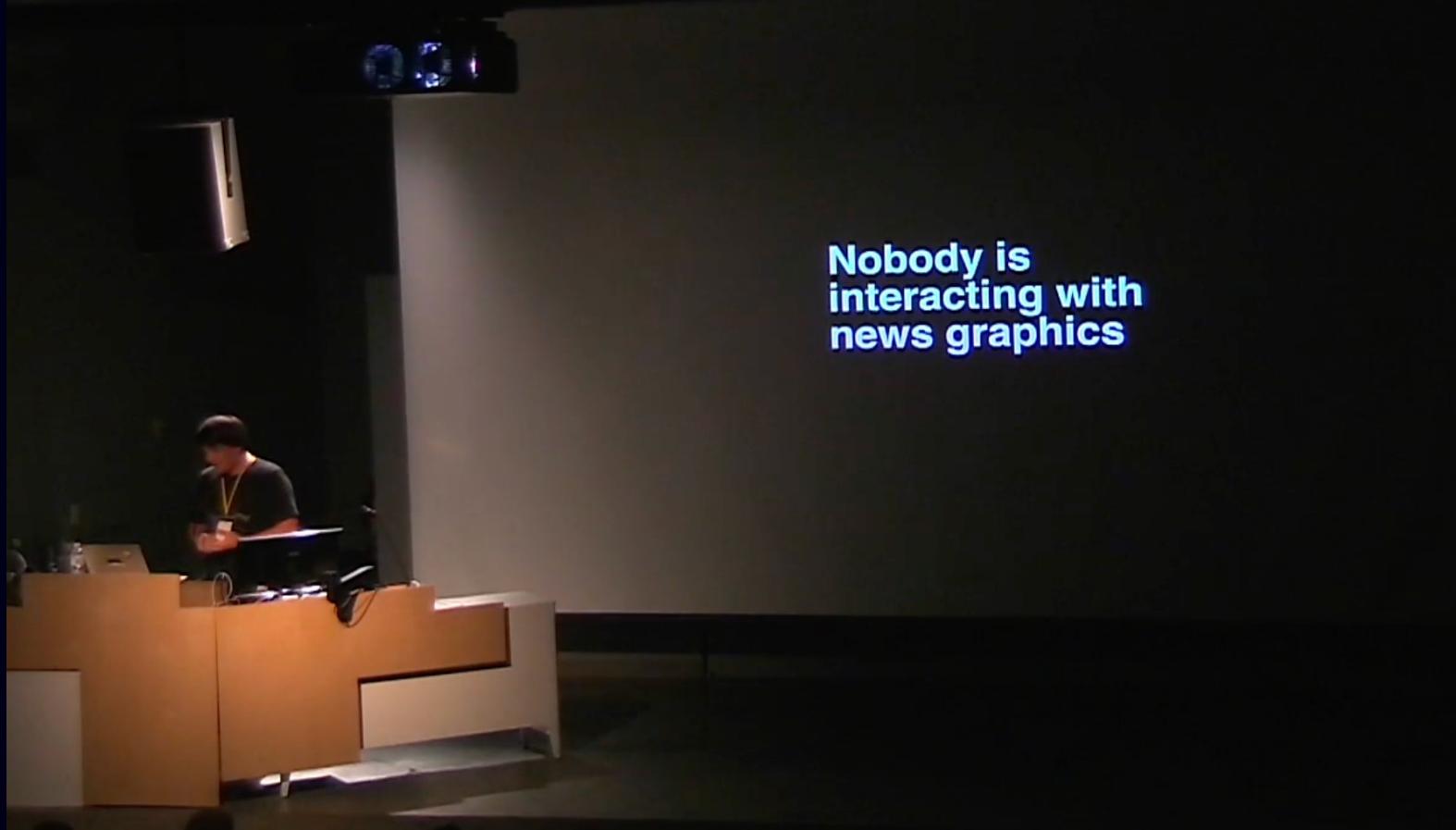
12:43 PM · 2 déc. 2020 · Twitter Web App

6,5 k Retweets **1 k** Tweets cités **16,1 k** J'aime

[Link](#)

Click & Hover





Gregor Aisch

Scrolly-telling

[Bruxelles malade](#)

Precarity is unevenly distributed across Brussels

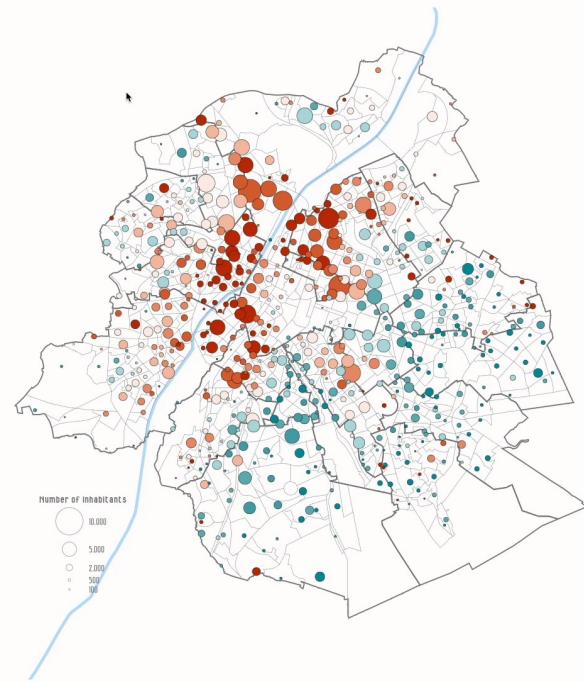
If we map out the EHR rate per statistical sector, this is what we get.

(As a reminder, people with an EHR status receive welfare payments to finance their healthcare. So, the EHR rate is the ideal indicator for representing precarity in Brussels.)

You can immediately see that the North-West of Brussels is **poor** and densely populated (the bubbles are larger). Conversely, the South-East is **rich** and less populated (the bubbles are smaller).

To know the name of a neighborhood, its number of inhabitants and its EHR rate, place your cursor on the bubble of your choice.

The data is from 2018, which is the most recent to this degree of precision.



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The Pudding

is a digital publication that ~~explains ideas debated in culture with visual essays~~ is the best internet rabbit hole. You might have seen our story on repetition in songs , but we've also made stuff about roasting your Spotify  and world population . Some of my favorite projects are about gayborhoods , the best beer cities , and death and Wikipedia .

So, welcome to The Pudding. Get cozy, you could be

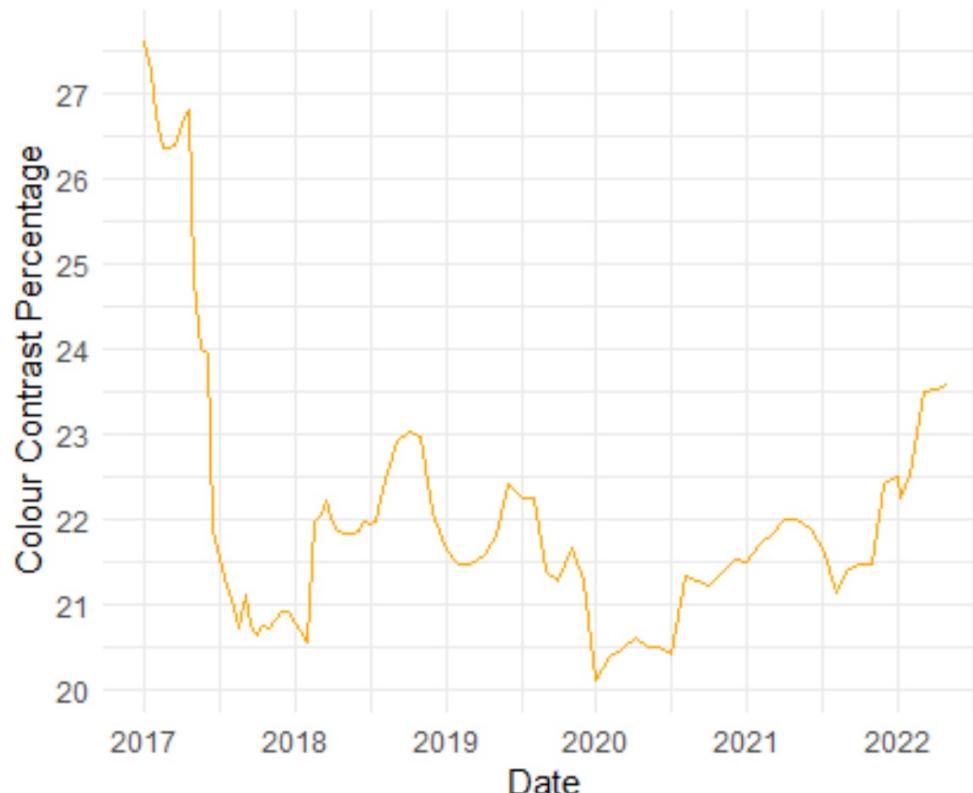
[Display a menu](#)



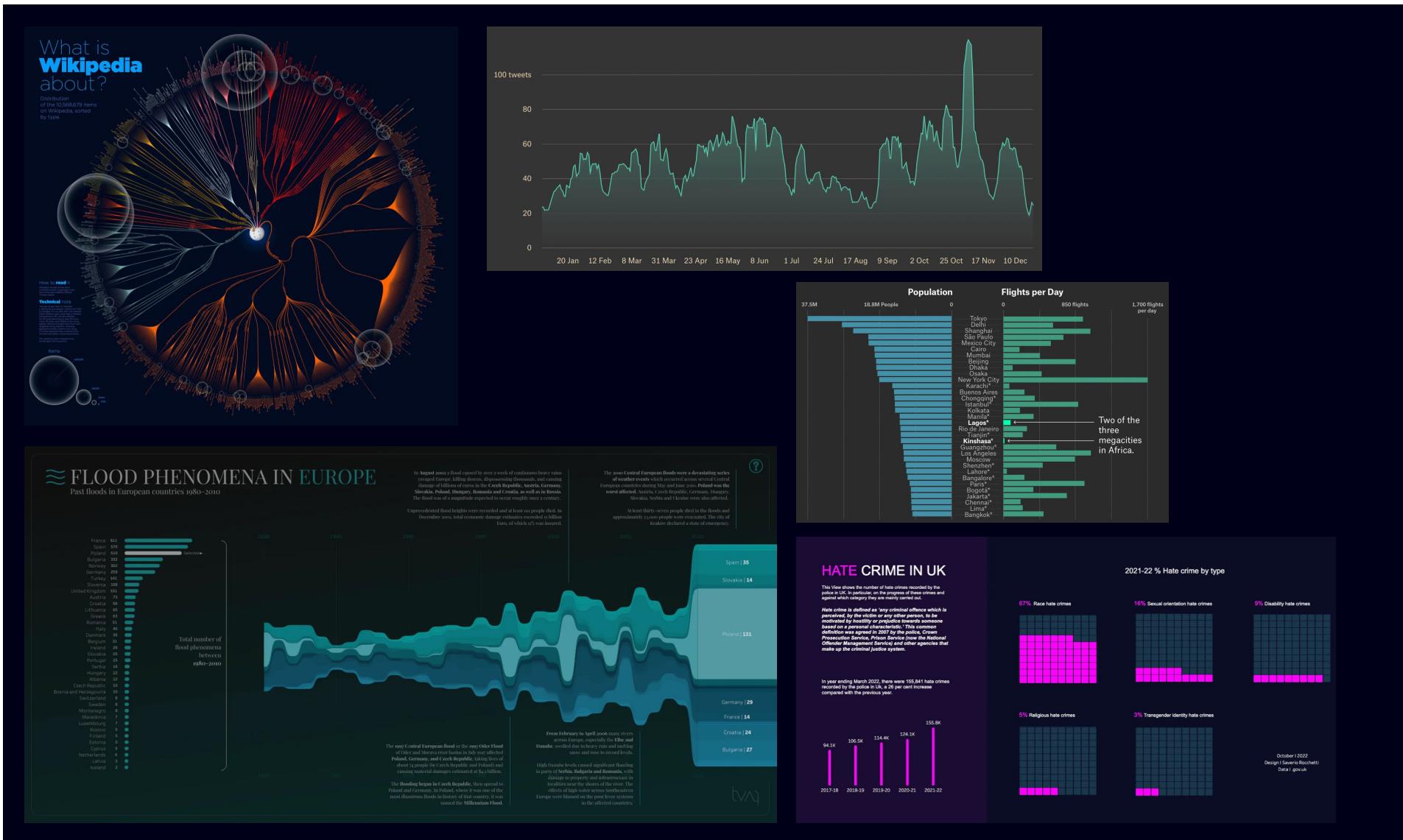
Dataviz as an art?

Kant: "le beau est ce qui plaît **universellement** sans concept"

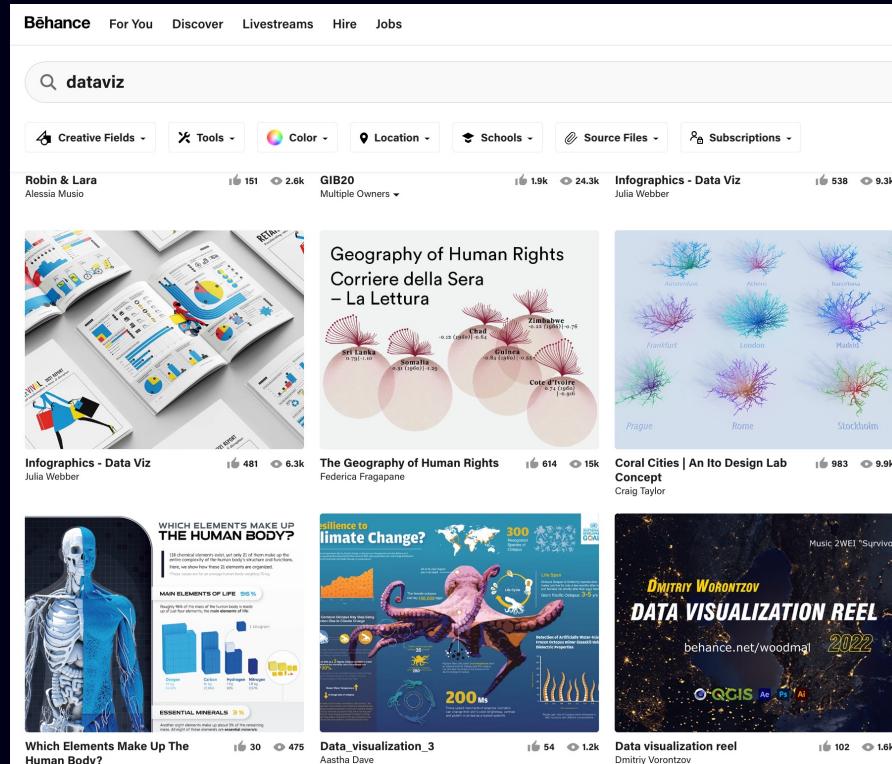
Colour Contrast Percentage for Mobile Clients



Robyn Goldsmith | #TidyTuesday



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Geography of Human Rights (Corriere della Sera – La Lettura) 614 15k

The Geography of Human Rights (Federica Frapapane) 614 15k

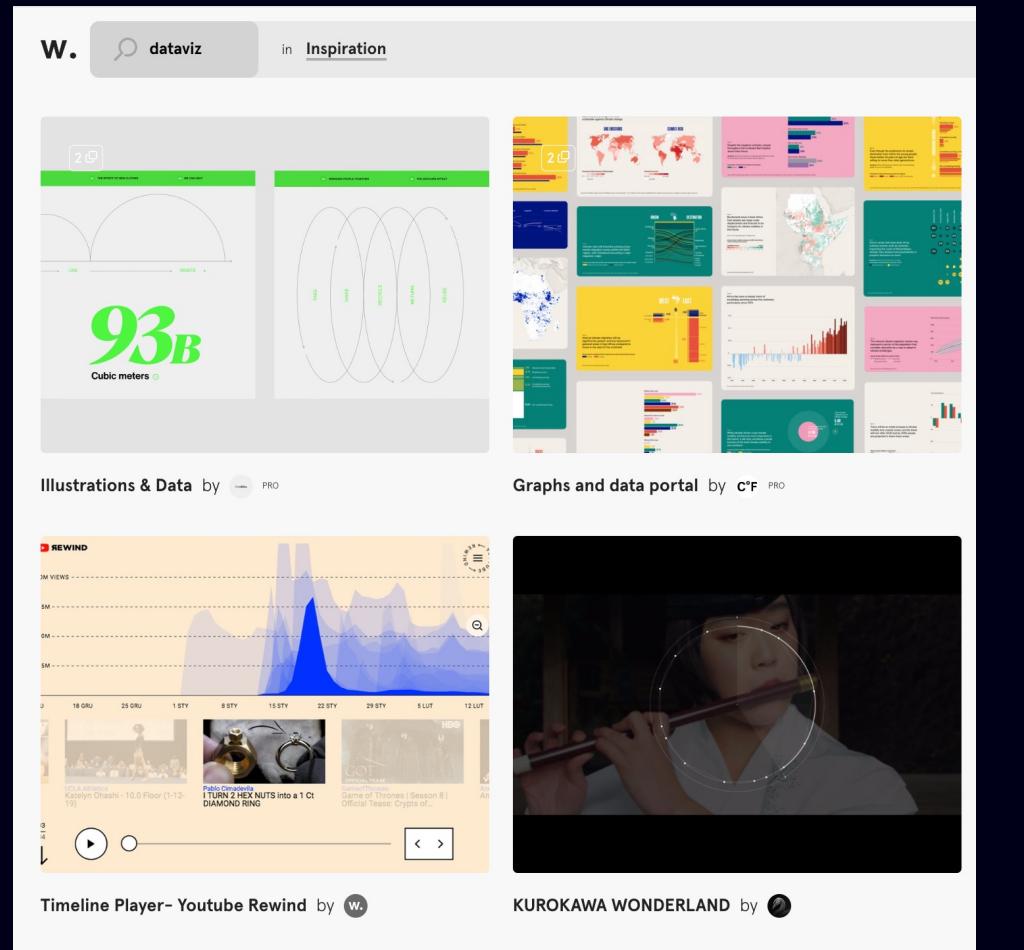
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Awwwards



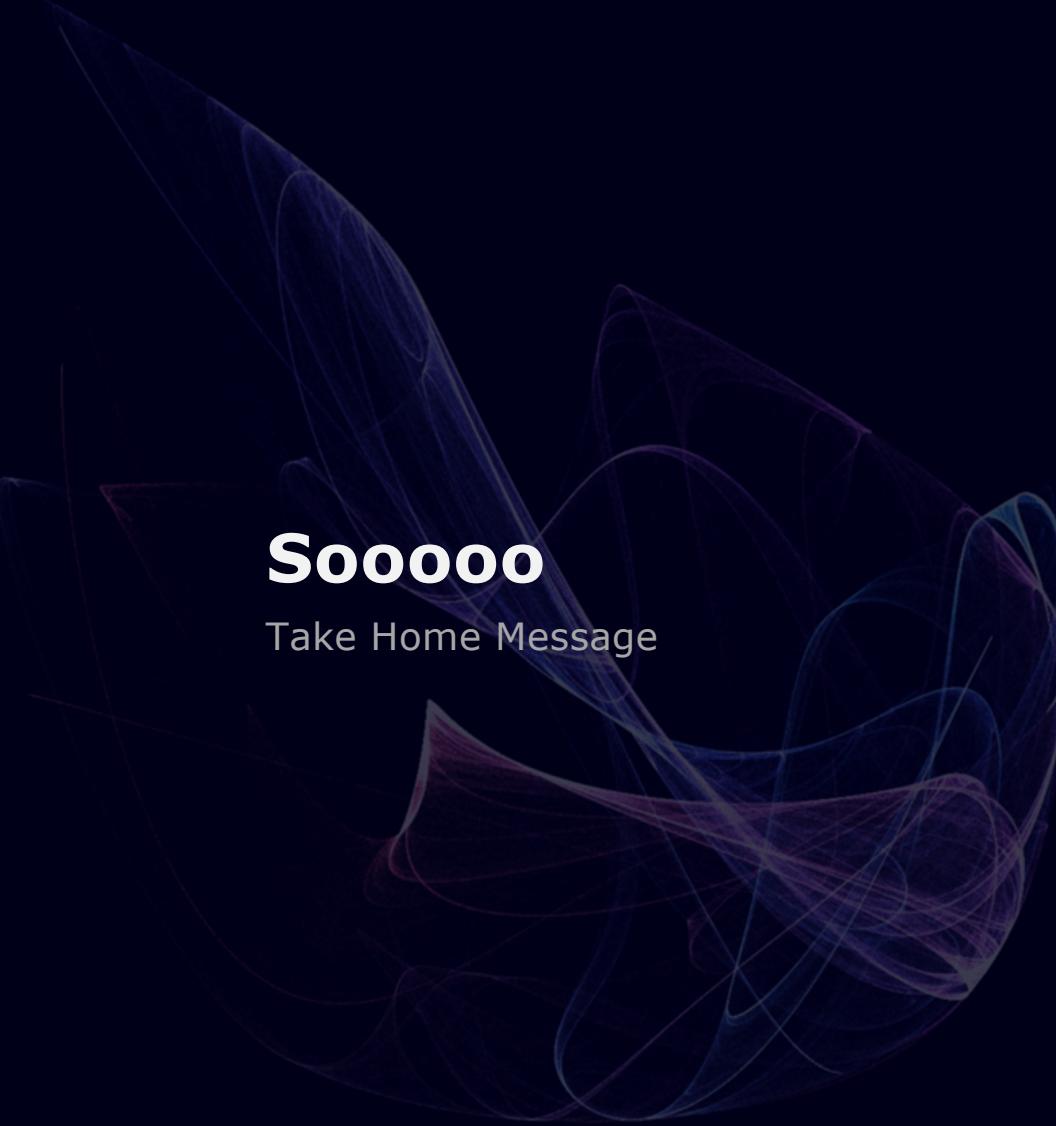
W. dataviz in Inspiration

Illustrations & Data by PRO

Graphs and data portal by PRO

Timeline Player- Youtube Rewind by W.

KUROKAWA WONDERLAND by



Sooooo

Take Home Message



Topic is key

Know the rules

Break the rules

Creativity is
dying,
uniformity is
everywhere.

Know the chart types

Break the chart types

<https://www.creativebloq.com/news/look-the-same>

Use annotation to tell a story

Do not focus on complexity

Learn **design** skills

YVES SAINT LAURENT → **SAINT LAURENT**

BALENCIAGA → **BALENCIAGA**

BURBERRY
London, England → **BURBERRY**
LONDON ENGLAND

Berluti
Paris → **BERLUTI**
PARIS

BALMAIN
PARIS → **BALMAIN**
PARIS



Yan Holtz

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@r_graph_gallery

Dataviz-inspiration.com

github.com/holtzy/Talk