Vis #1

https://v.youku.com/v_show/id_XNDQzNjQ1ODk5Ng

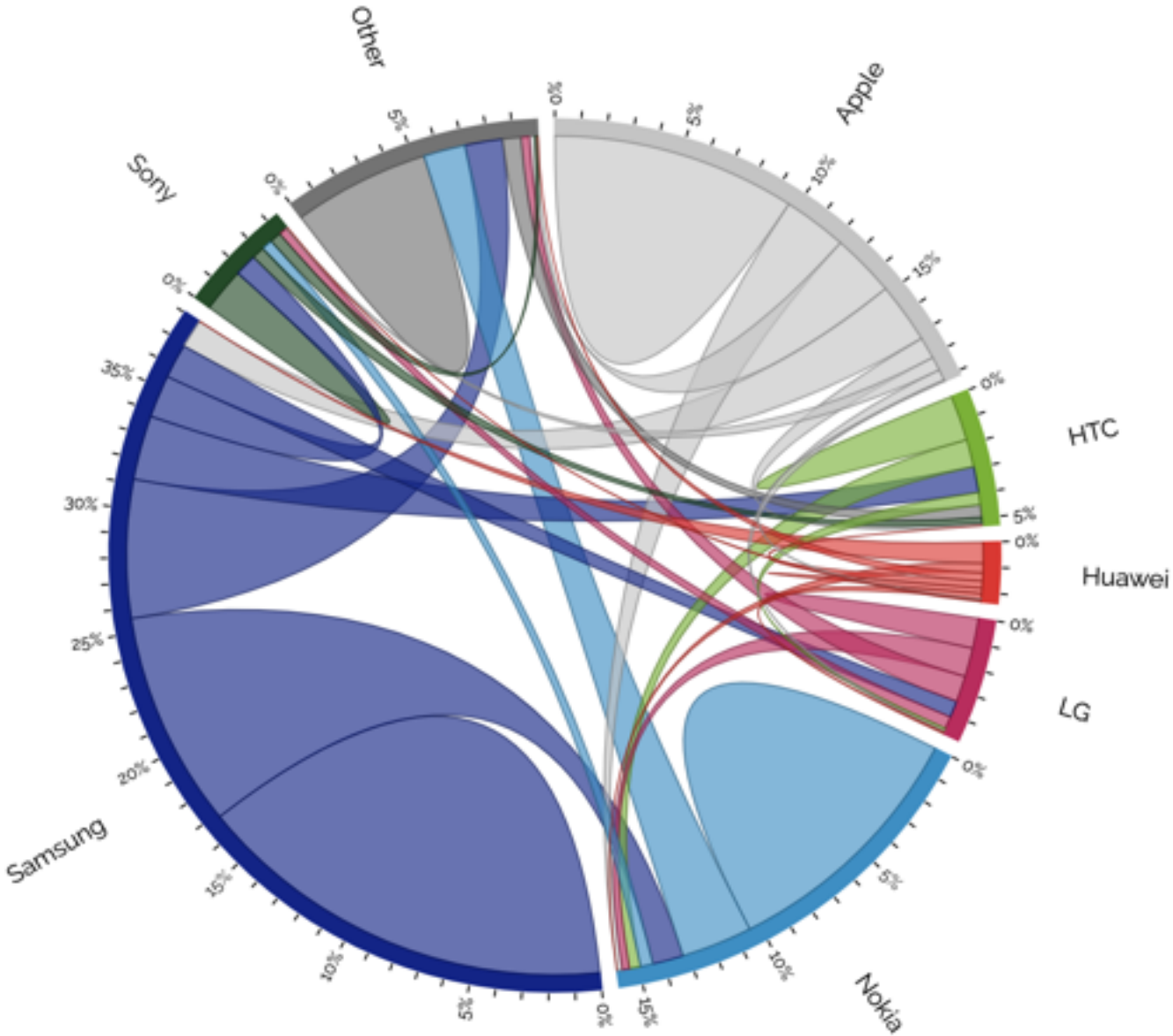
Top Vis Competition

MSBD5005. An
Weigang

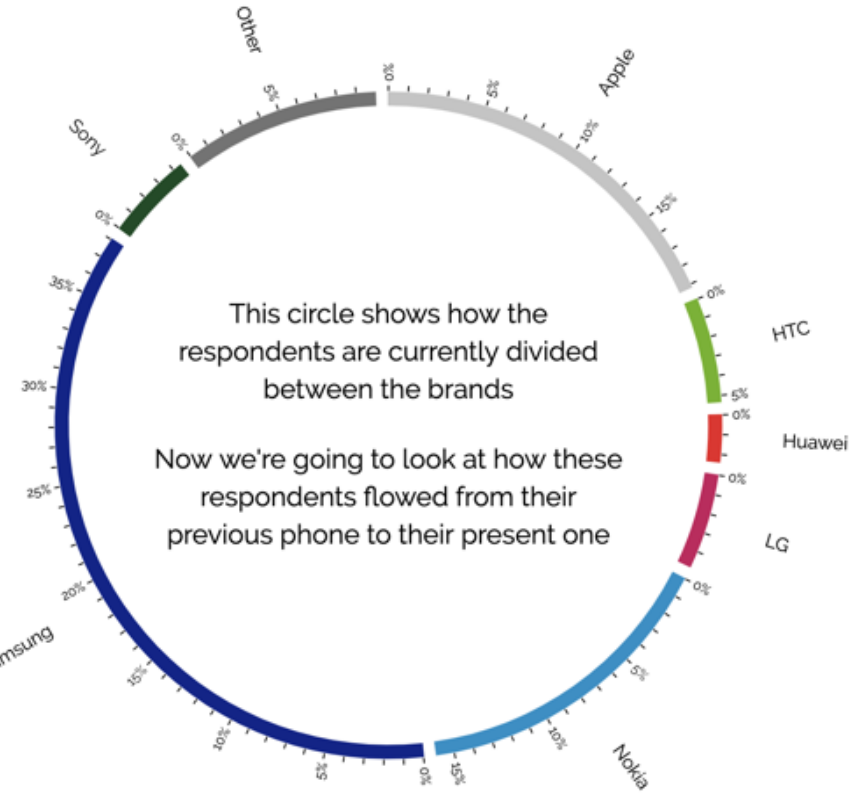
Chord Diagram

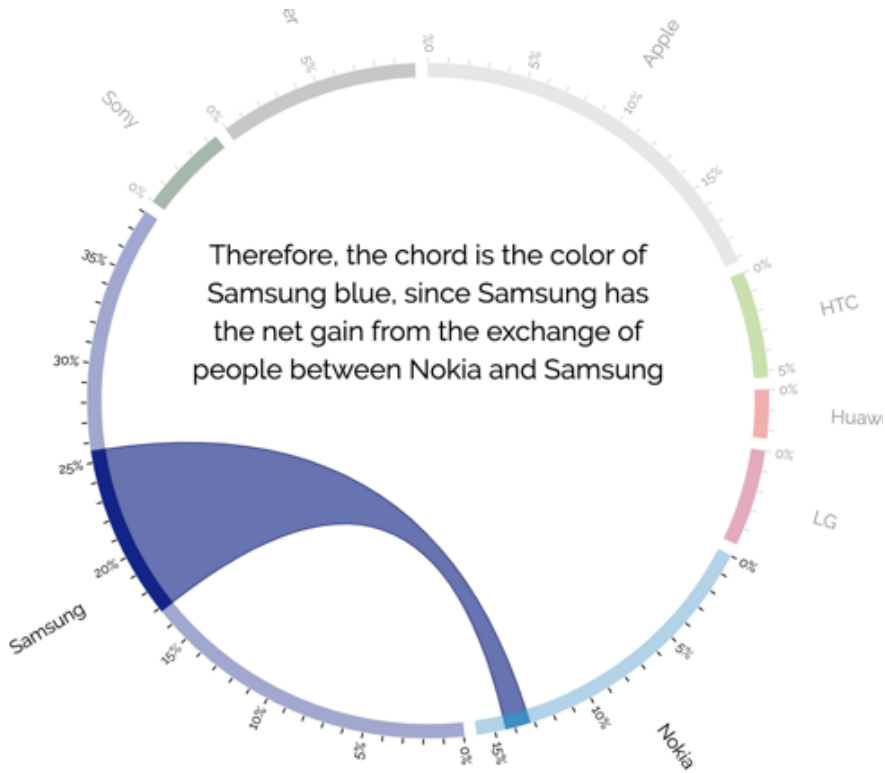
A chord diagram is used to visualize inter-relationships between different groups.

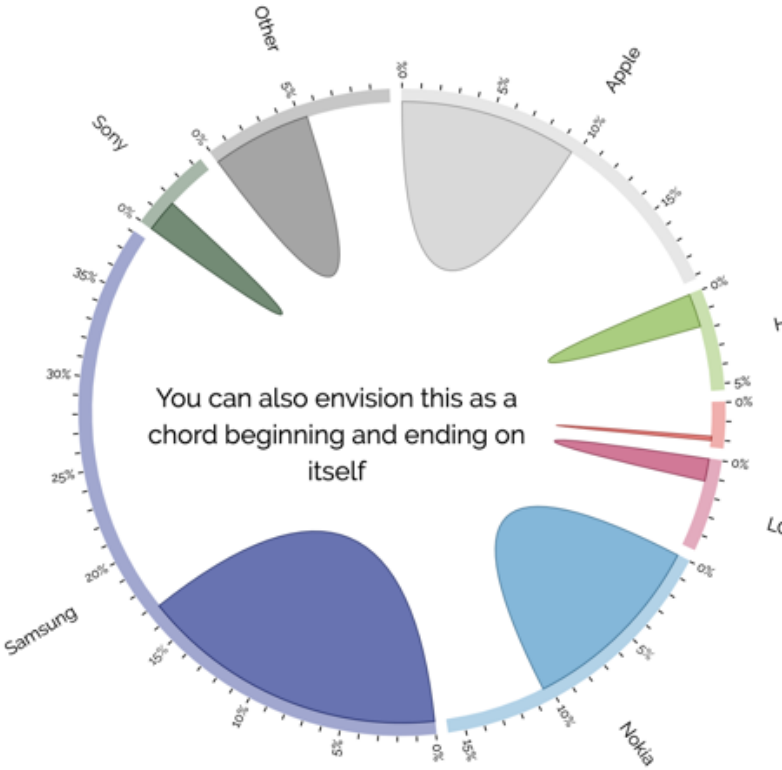
The values of the groups or entities are organized in a circle, and the relationships between them are created and shown with curves of different colors.



Intro Steps







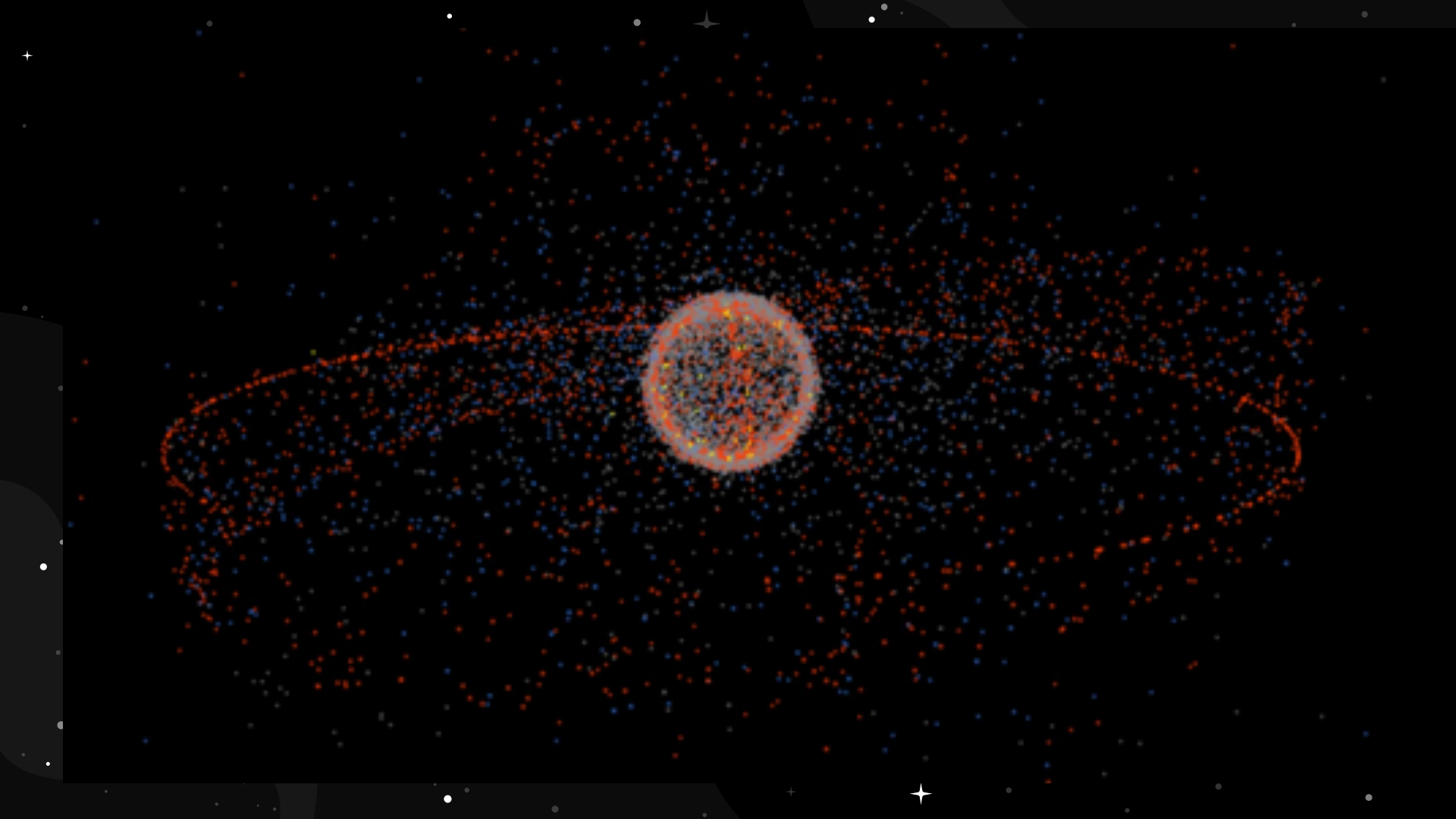
https://www.visualcinnamon.com/2014/12/using-data-storytelling-with-chord.ht

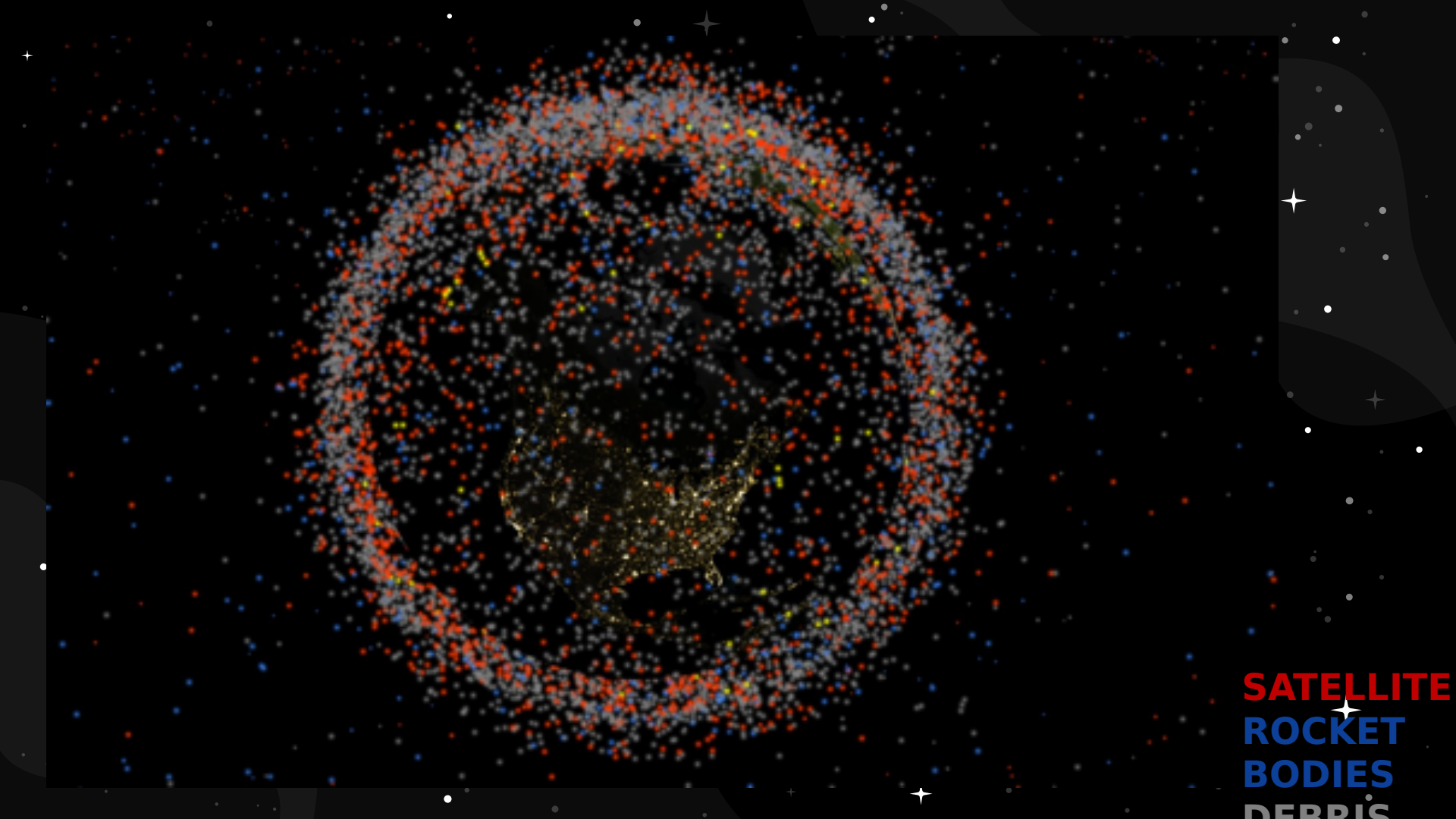
Thanks

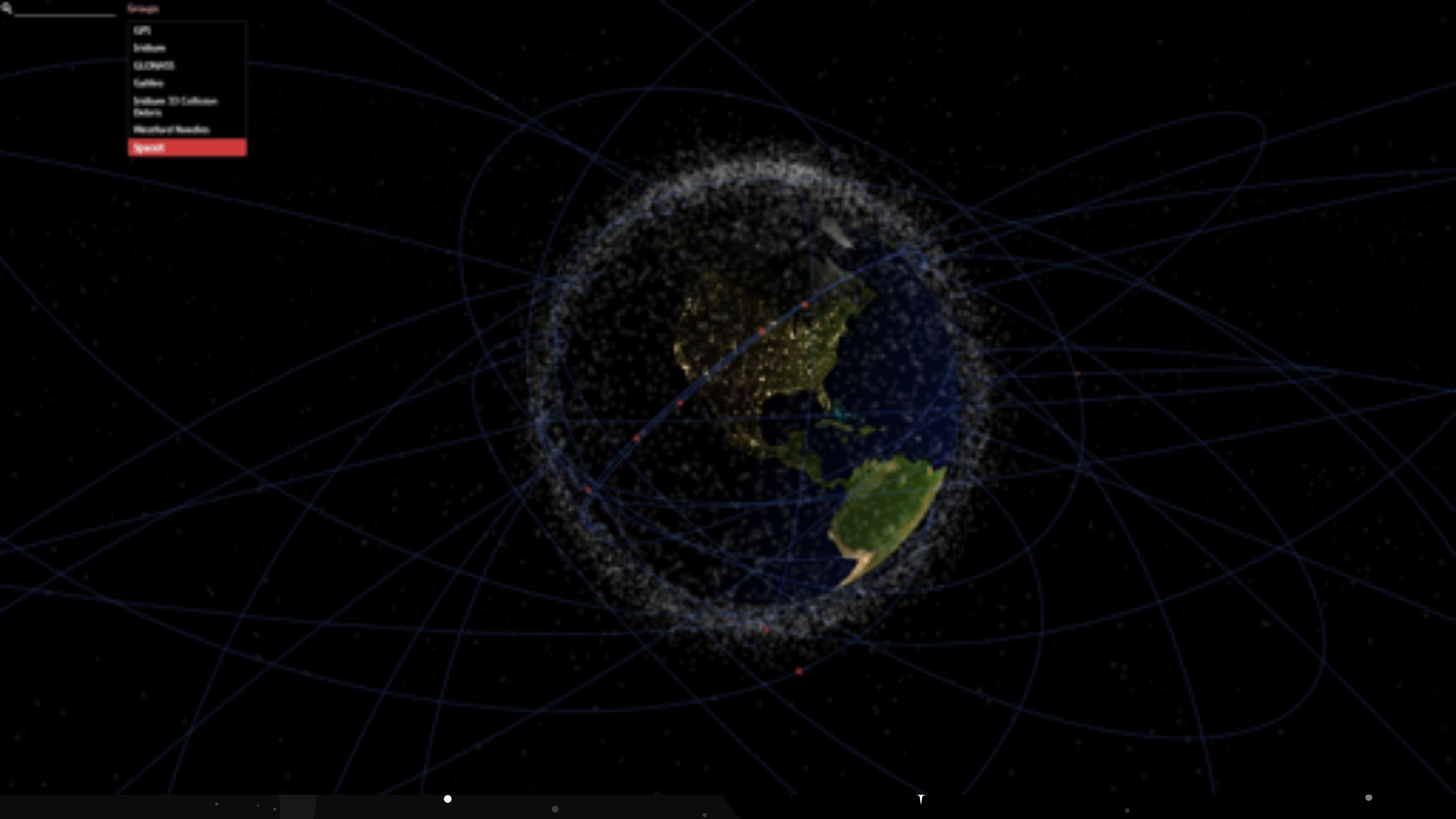
Vis #2

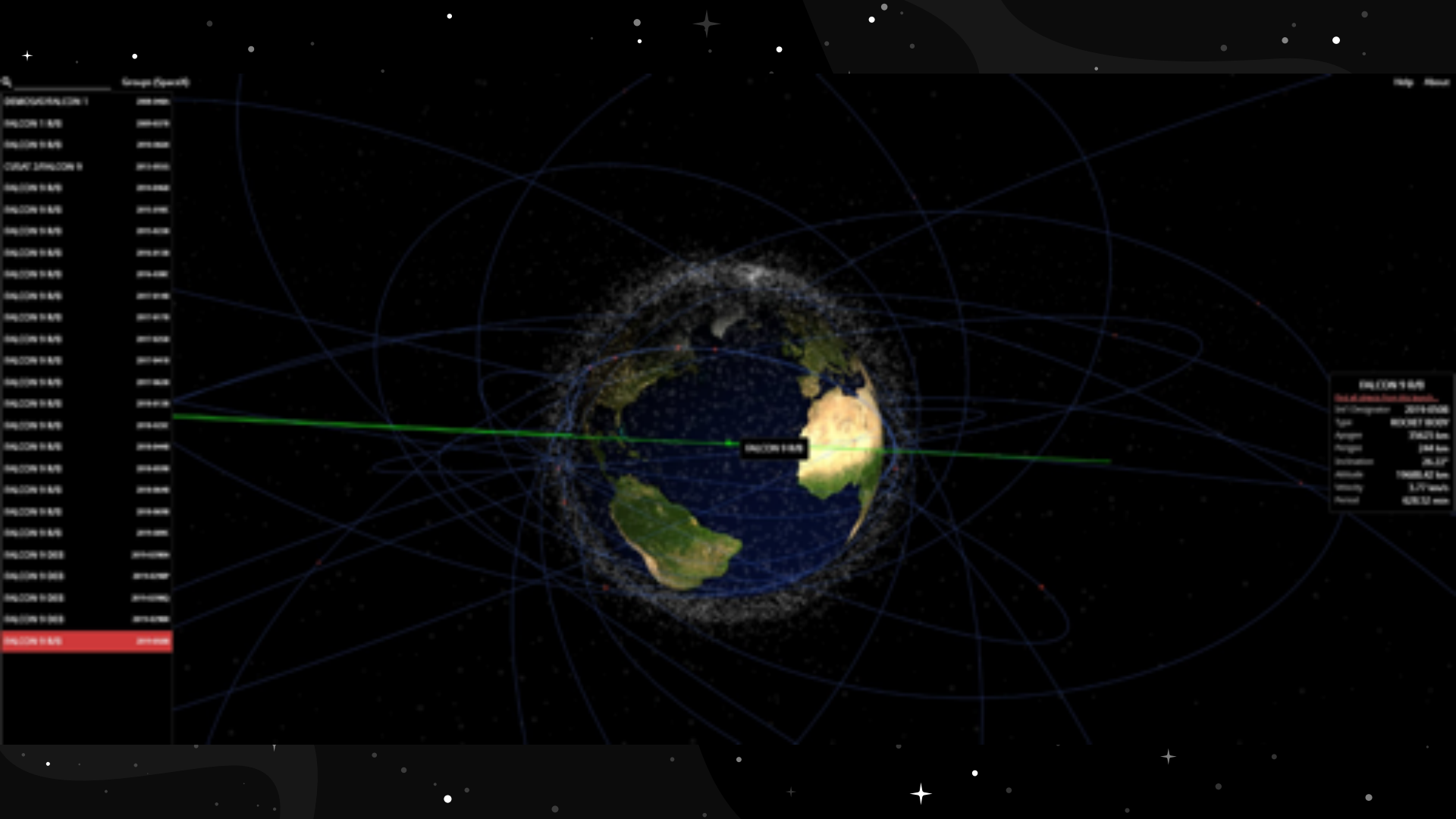
Basker Ronisha

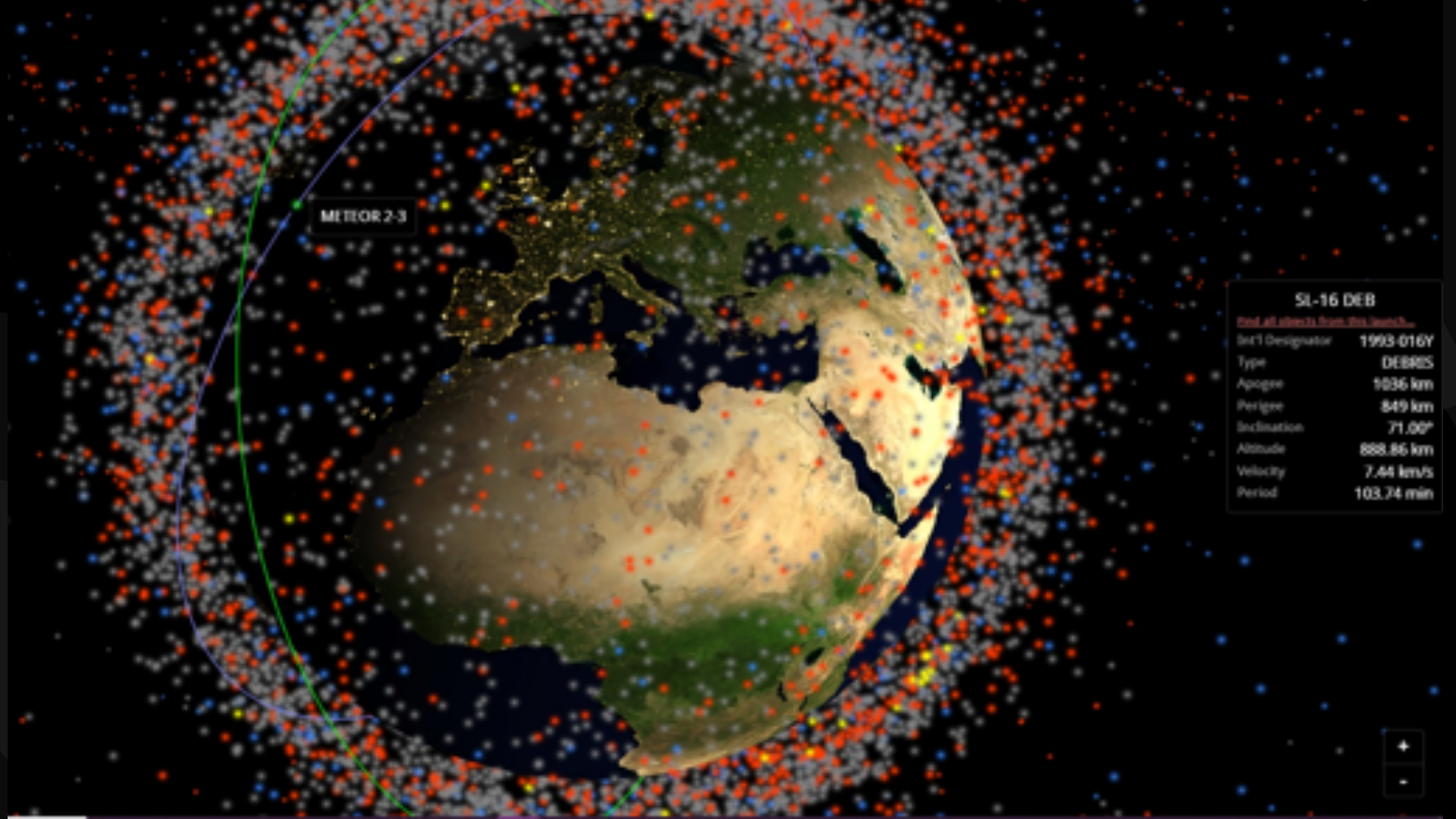
STUFF IN SPACE




SATELLITE
ROCKET
BODIES
DEBRIS


Groups
GPS
Iridium
GLONASS
Galileo
Iridium 33 Collision Debris
Russian Asat
Spacecraft


Groups (SpaceX)
Help
About
FALCON 9 BLOCK 5
FALCON 9 BLOCK 5


METEOR 2-3
SL-16 DEB
Intl Designator 1993-016Y
Type DEBRIS
Apogee 1036 km
Perigee 849 km
Inclination 71.00°
Altitude 888.86 km
Velocity 7.44 km/s
Period 103.74 min

Vis #3

https://www.youtube.com/watch?v=KKsloC6hRQo

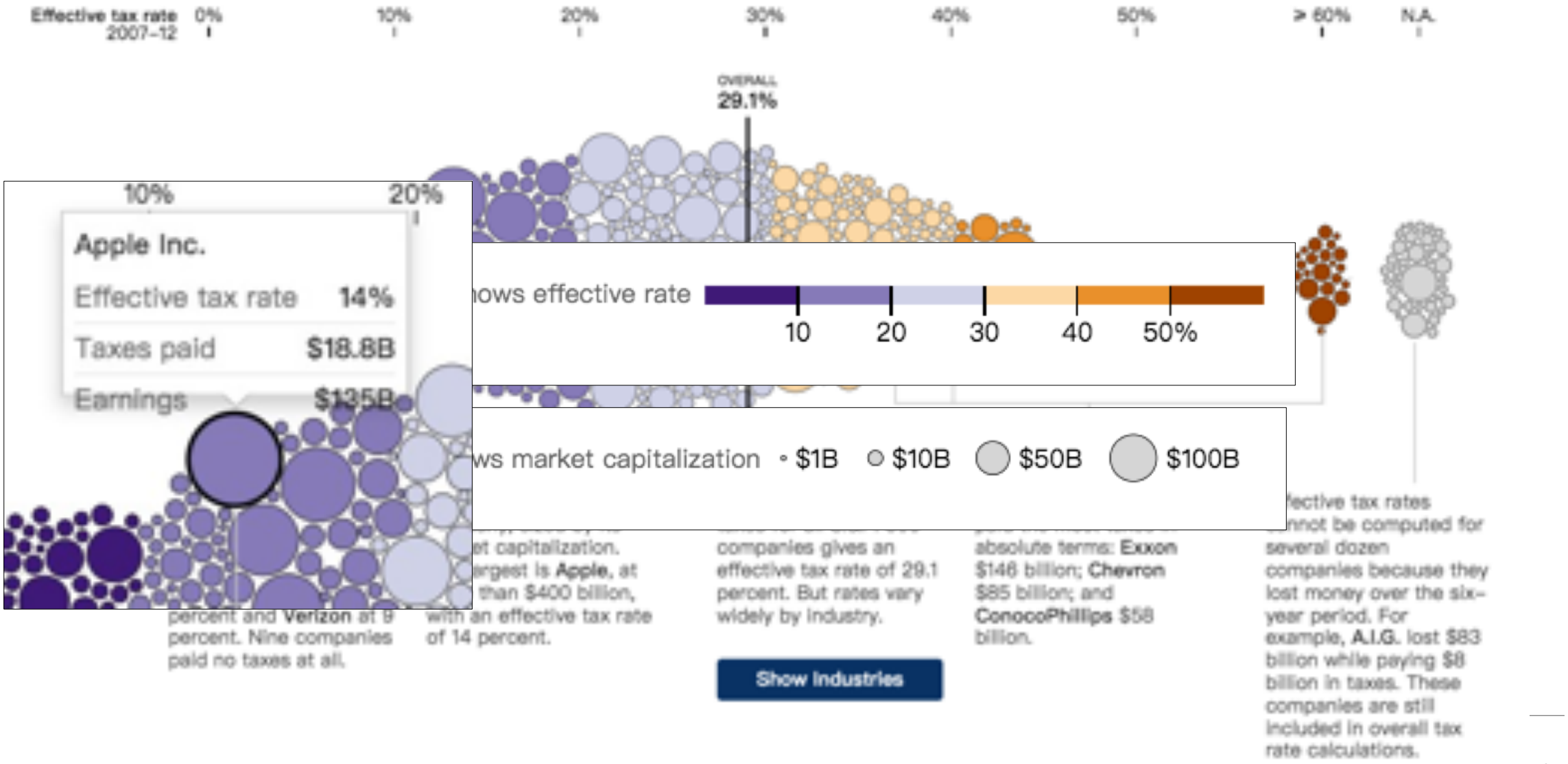
Tax Rates of U.S. Companies

CAI Haorui, 20616752

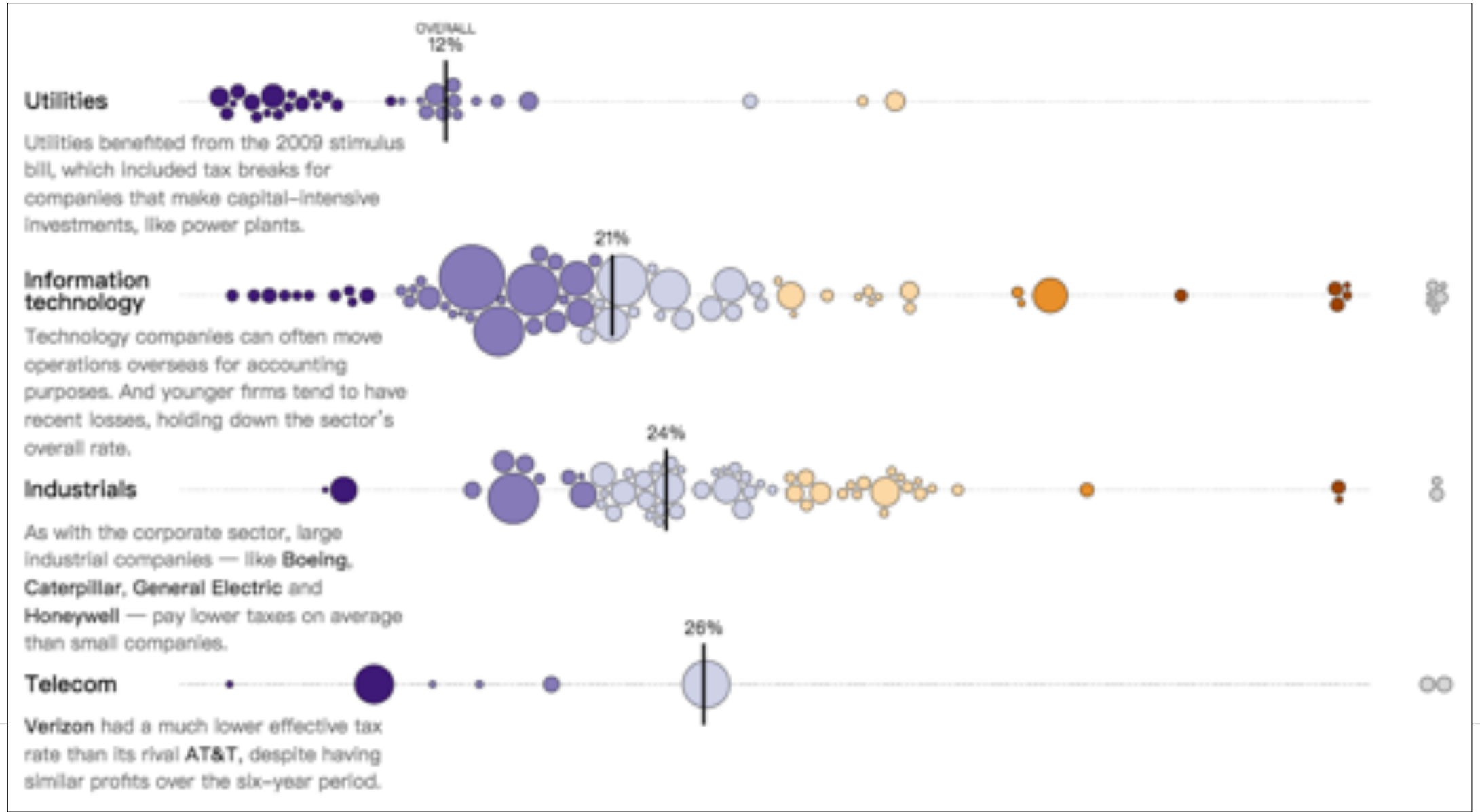
Source & Data

URL: https://archive.nytimes.com/www.nytimes.com/interactive/2013/05/25/sunday-review/corporate-taxes.html
Data Source: S&P Capital IQ (on 500 companies in U.S.).
Time: From 2007 to 2012

The effective tax rates of U.S. companies (Overall)

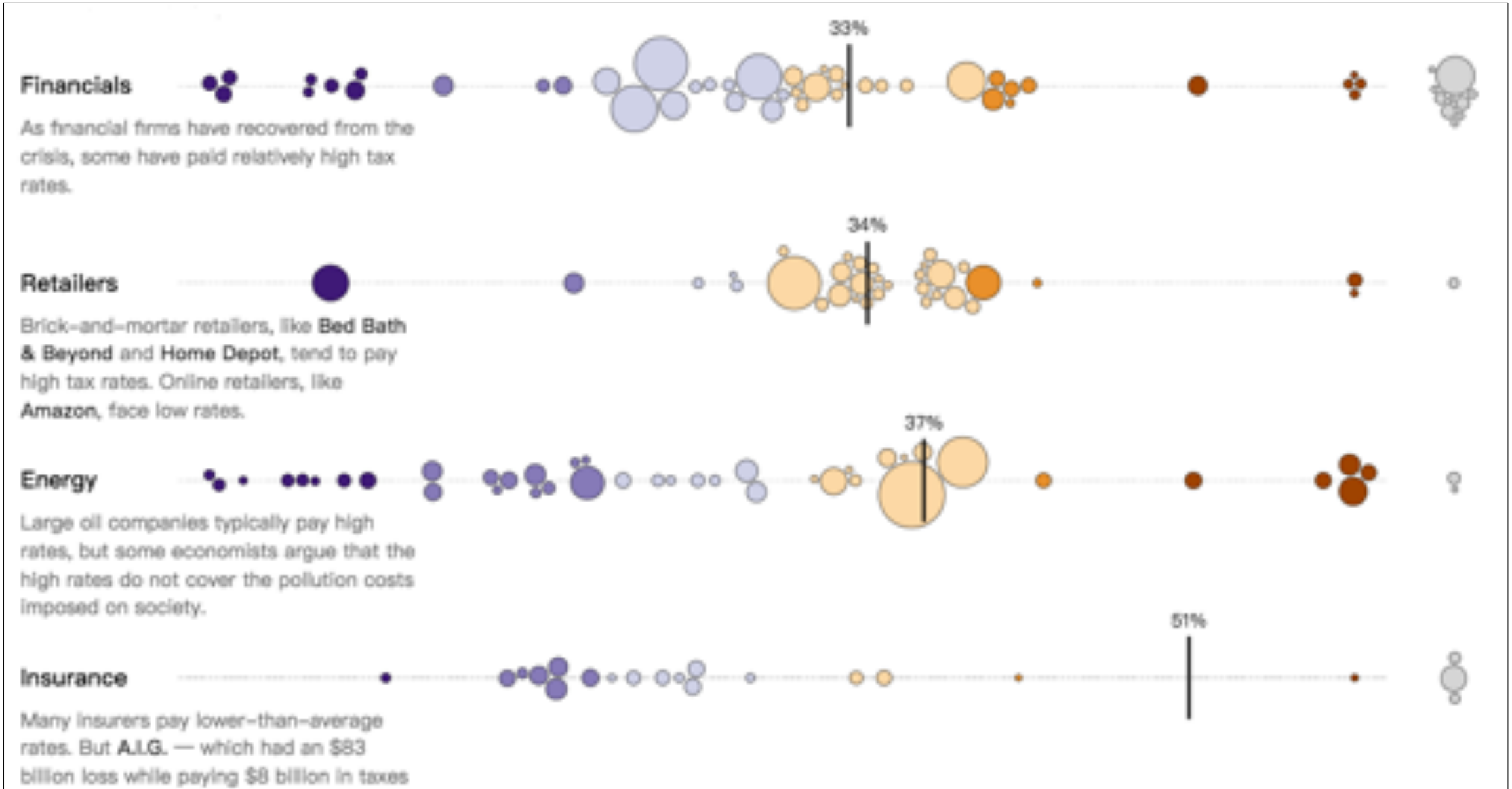


The effective tax rates of U.S. companies (Industry)



The effective tax rates of U.S. companies (Industry)

The effective tax rates of U.S. companies (Industry)



Advantages

Interactive

You can get the exact information (the actual tax, effective tax rate and the earnings) of a specific company by hovering your mouse over these bubbles.

Intuitive

The location and size of the bubble directly shows the actual tax paying situation of US companies.

Instructive

Tell us how serious the differences in tax paying between industries and companies.

Guide the government on how to effectively adjust tax policies.

Thanks!

Vis #4

https://www.youtube.com/watch?v=4lKYt3M7V-8

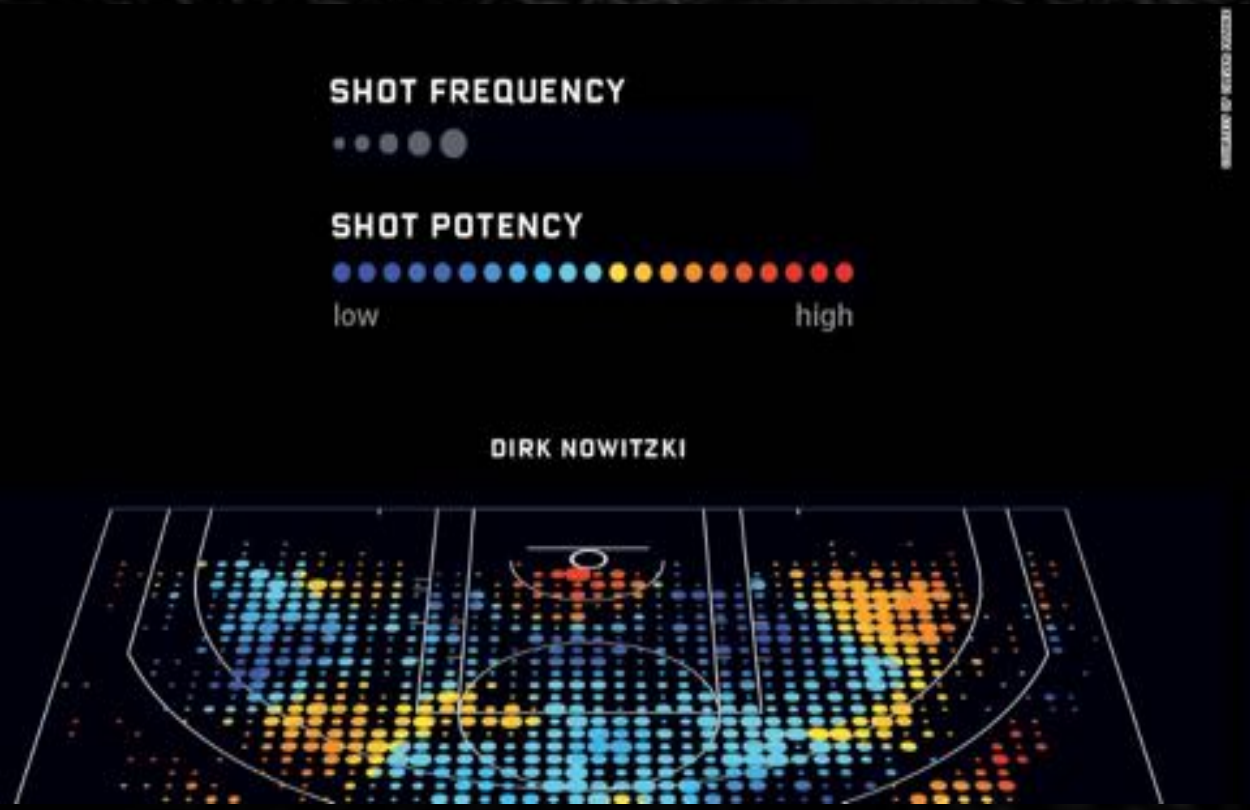
Top Visualization Competition

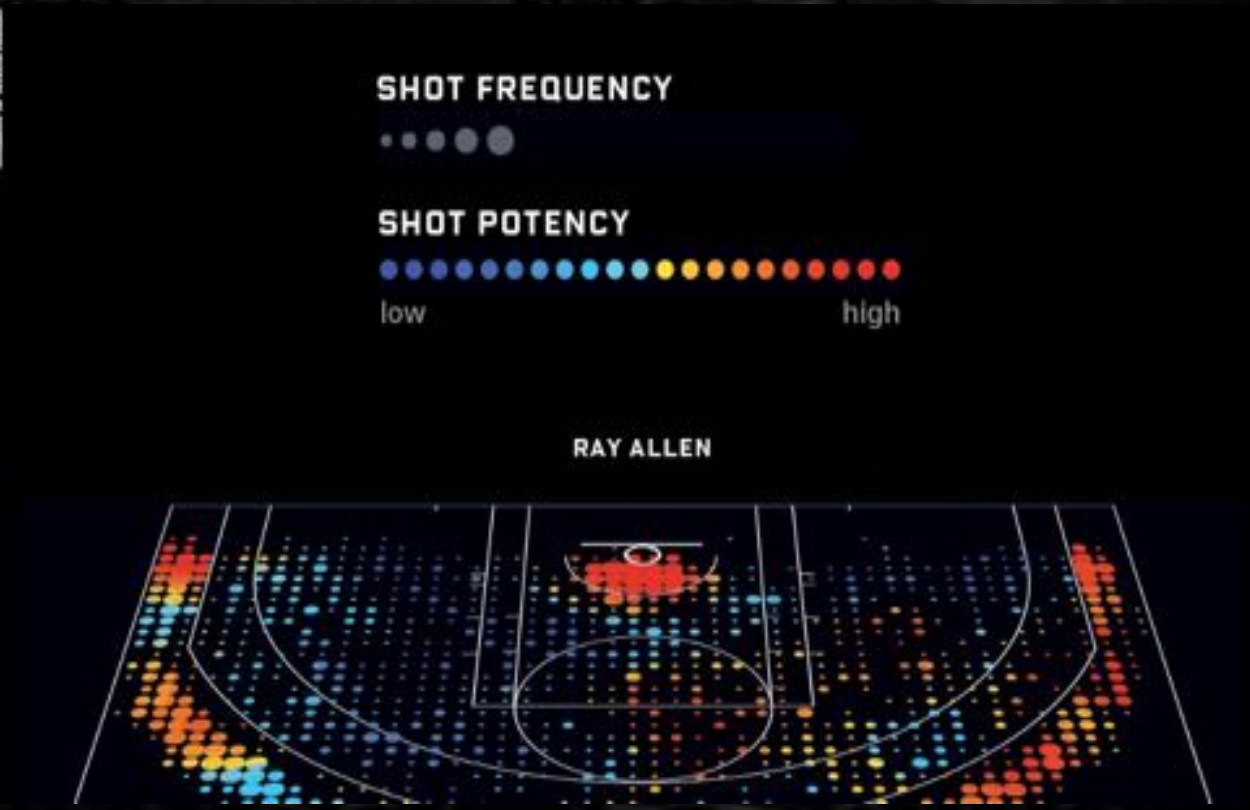
Basketball Shot Visualization

Presenter : CAO Ran

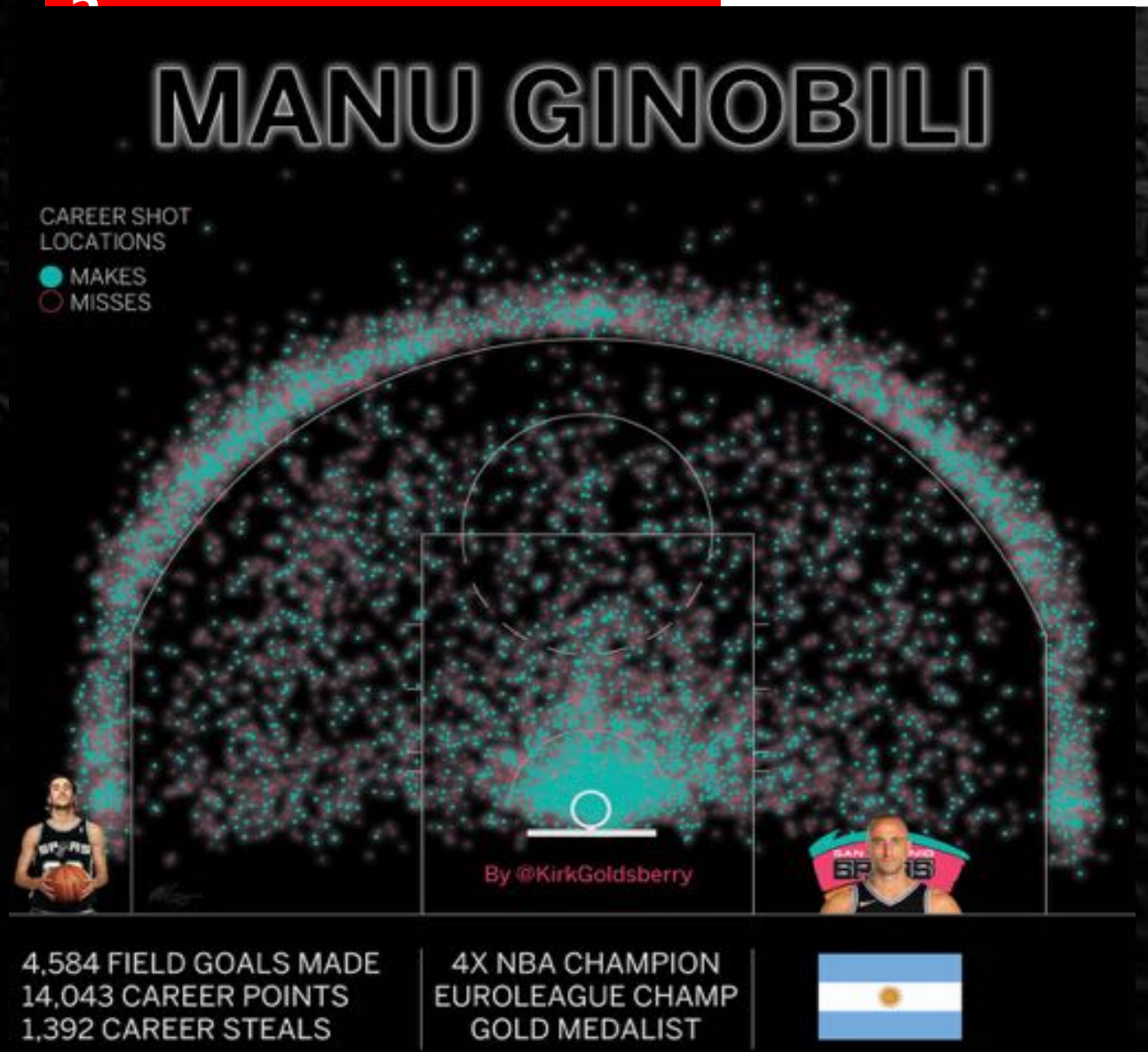
Shot Distribution Chart 1

- **Size of dot :** shot frequency
- **Different colour range from blue to red** : shot potency
- **Example :** show significant differences between **Dirk Nowitzki** and **Ray Allen**



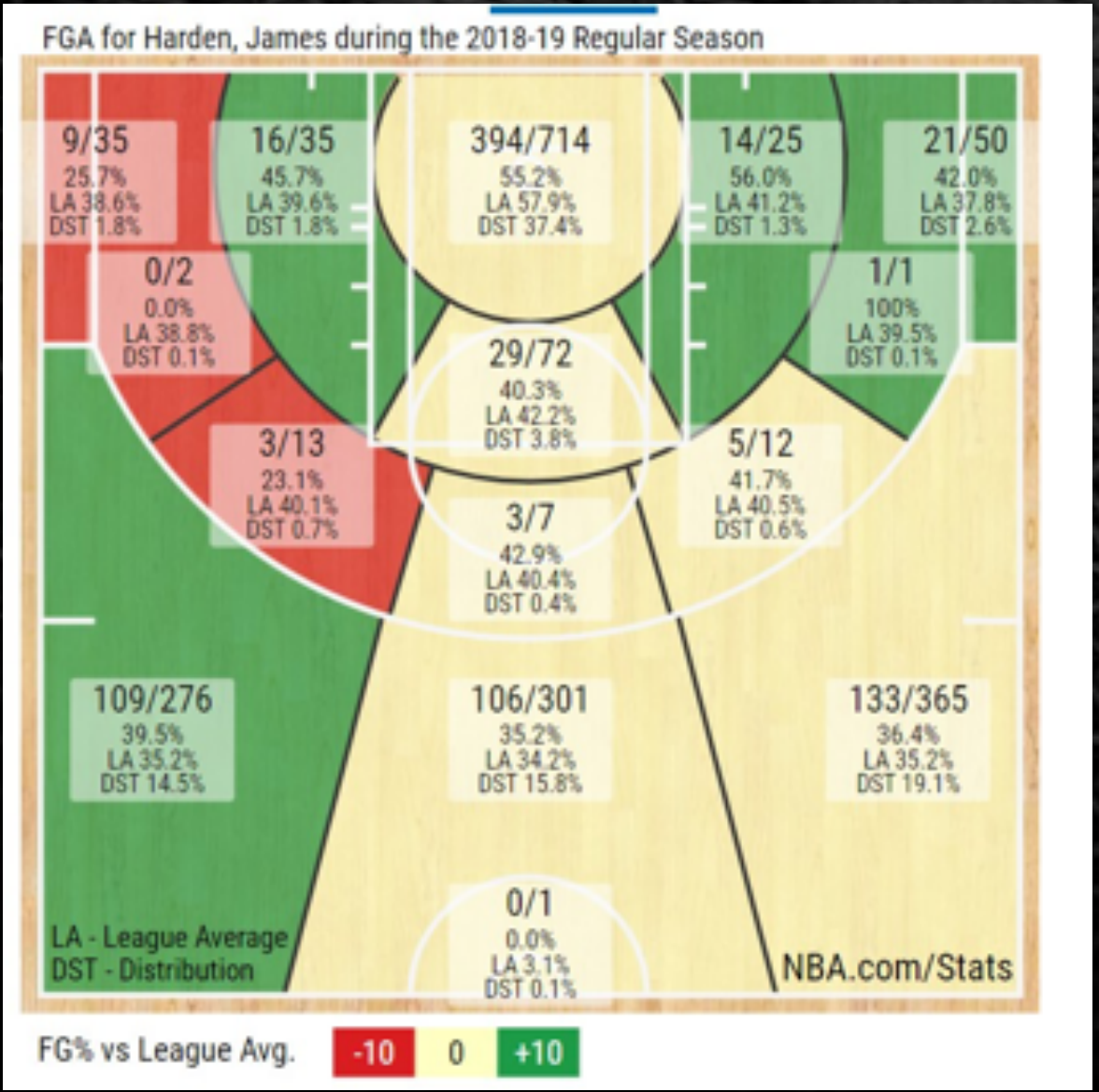


Shot Distribution Chart



- designed by **Kirk Goldsberry**
- **Green dots :** makes
- **Transparent dots with red border :** misses
- **Examples :** shows the career shot distribution of **Manu Ginobili**

Shooting heat map



- **Different colour :** different level of hit rate
- The number of shots in different area are presented on the chart
- **Examples :** shows the performance of **James Harden** during the last season

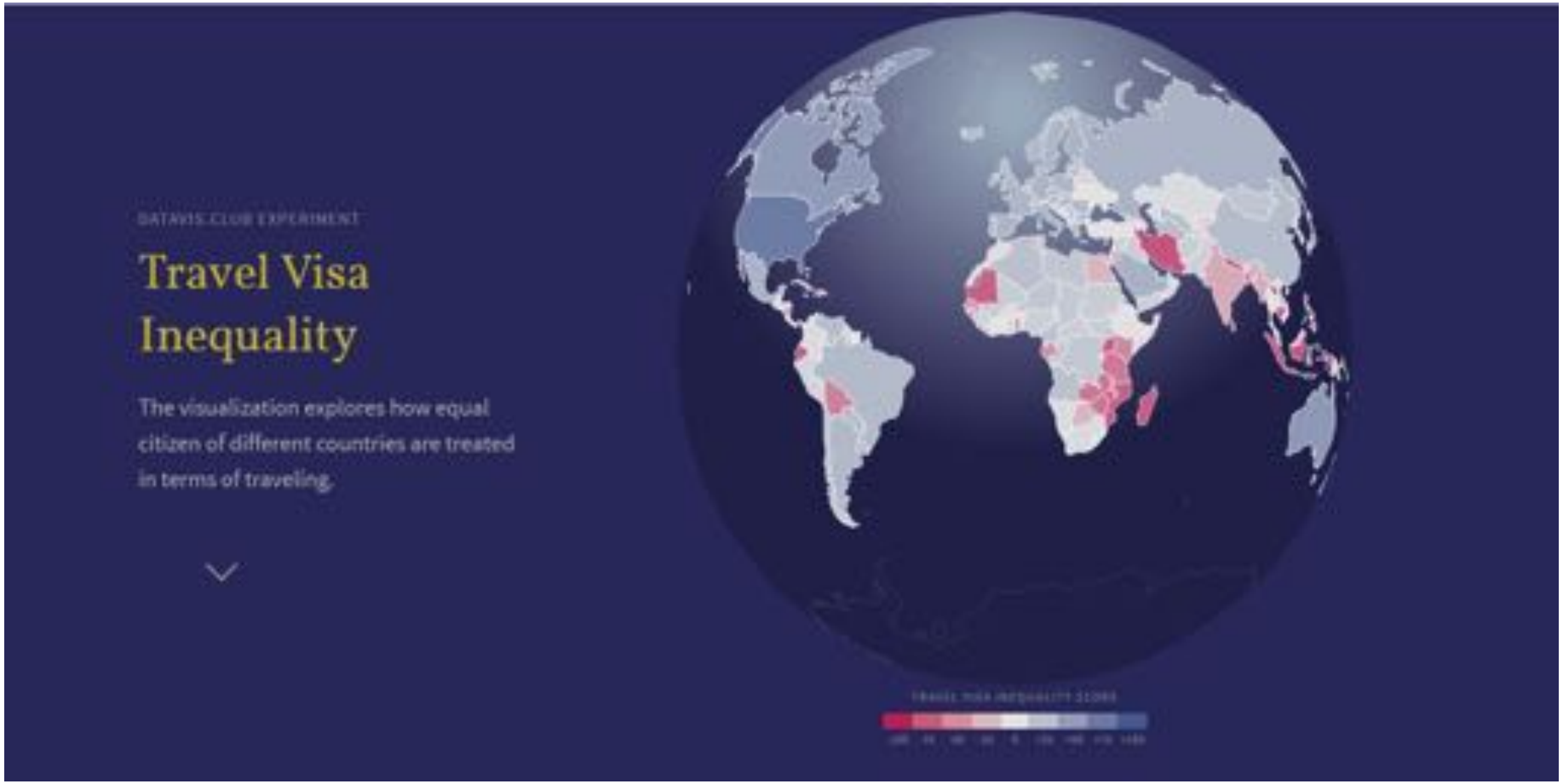
THANKS

Vis #5

https://www.youtube.com/watch?v=r5aoQNcexDA

Moment Chan

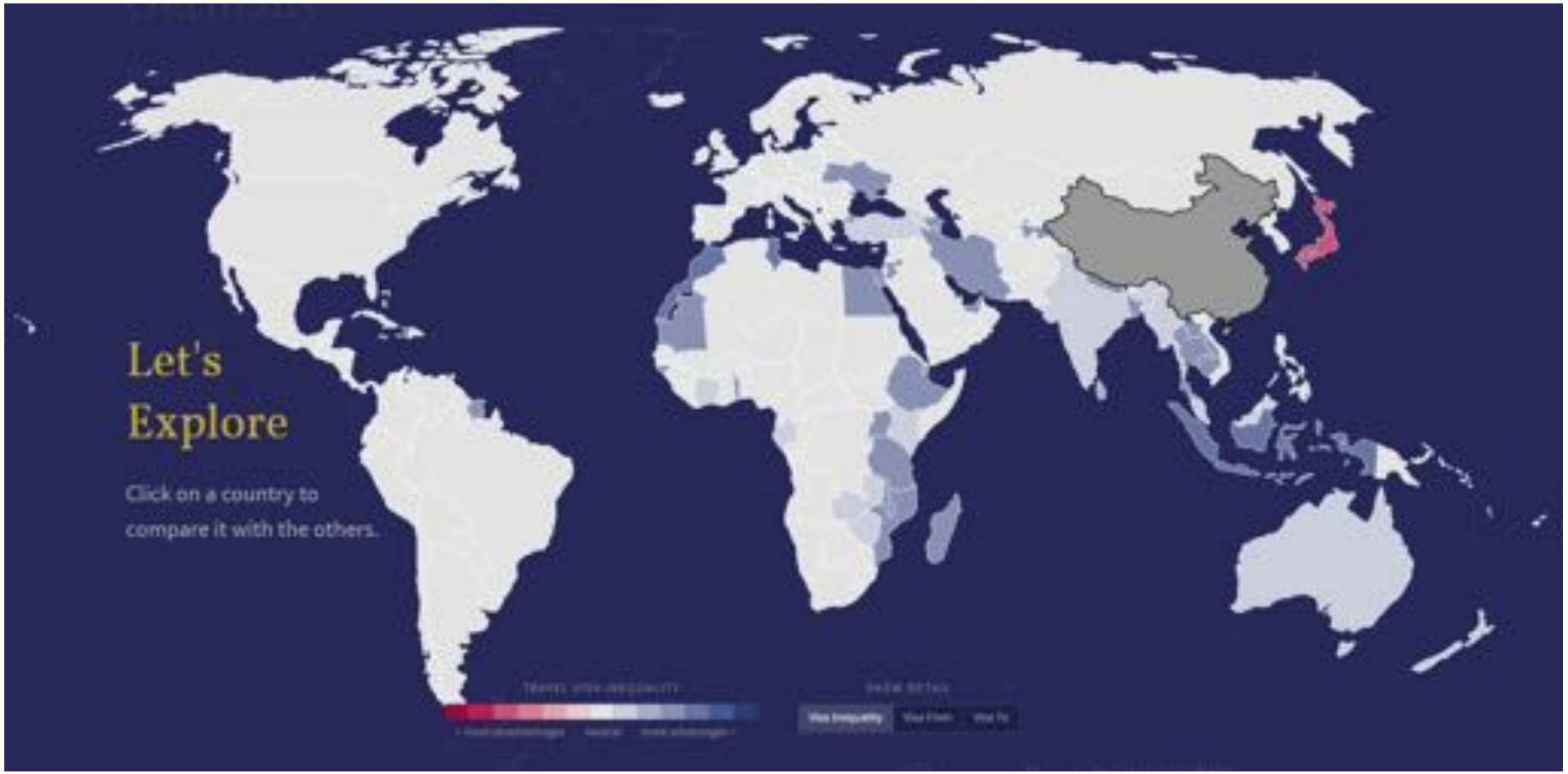
Travel Visa Inequality



Blue -> Advantage

Red -> Disadvantage

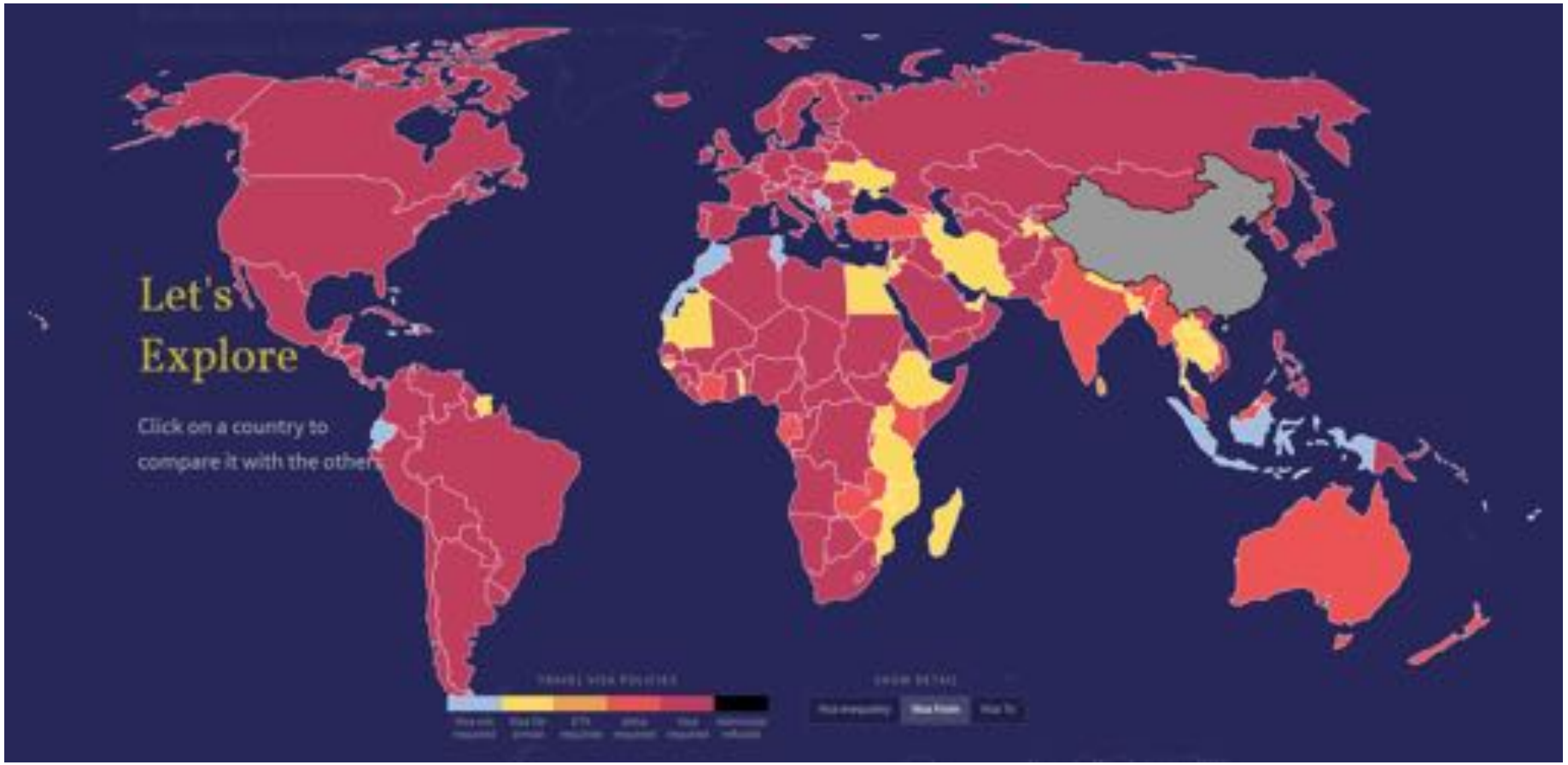
Travel Visa Inequality (China)



Blue -> Advantage
(Visa **not required** from China to Morocco)
(Visa **required** from Morocco to China)

Red -> Disadvantage
(Visa **not required** from China to Japan)
(Visa **required** from Japan to China)

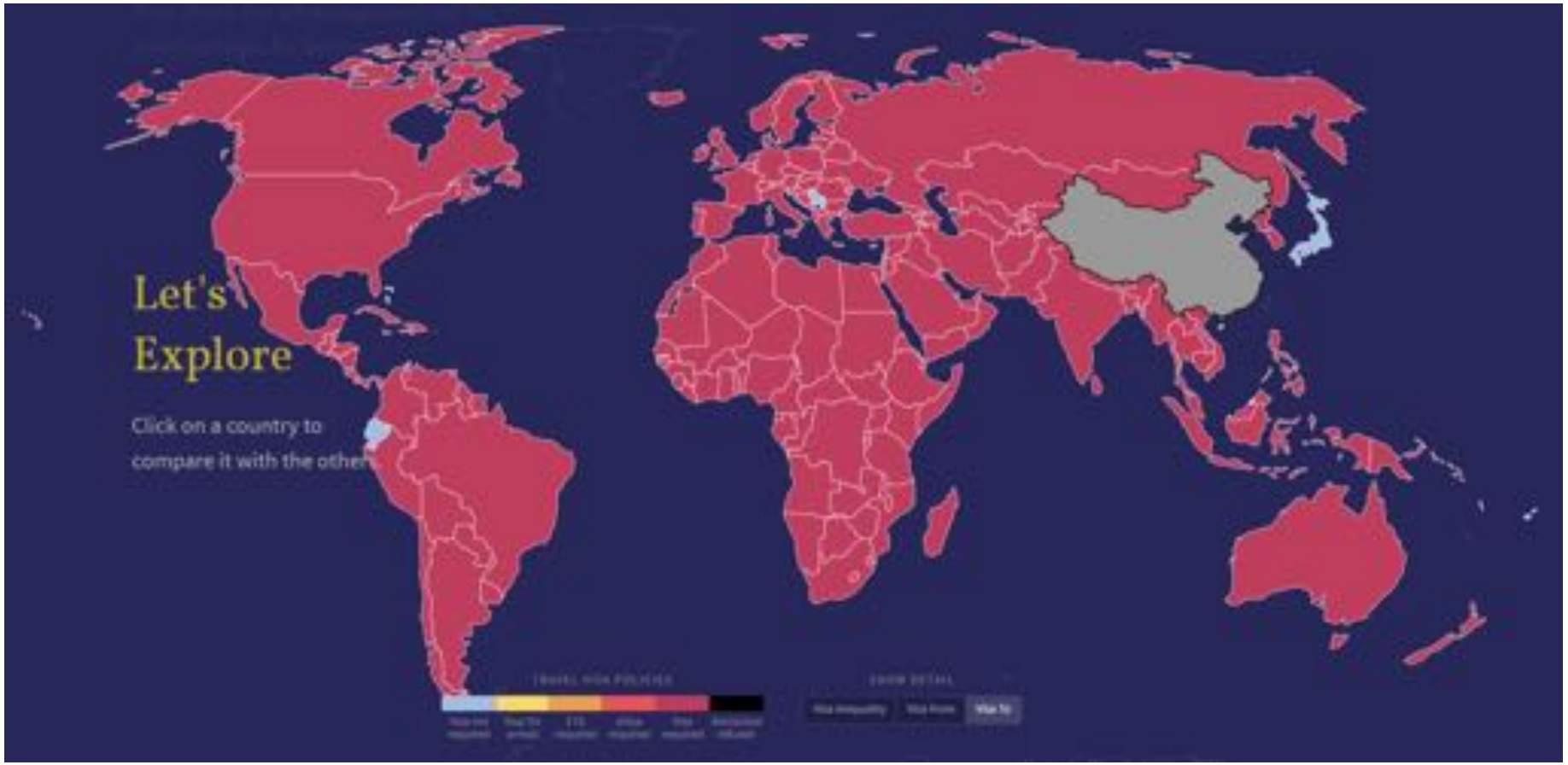
Travelling from China



Five Level:

- Visa not required
- Visa On arrival
- ETA required
- eVisa required
- Visa required
- Admission refused

Travelling to China



Five Level:

- Visa not required
- Visa On arrival
- ETA required
- eVisa required
- Visa required
- Admission refused

Travel Visa Inequality (USA)

Travel Visa Inequality (USA)

Ranking

SHOW

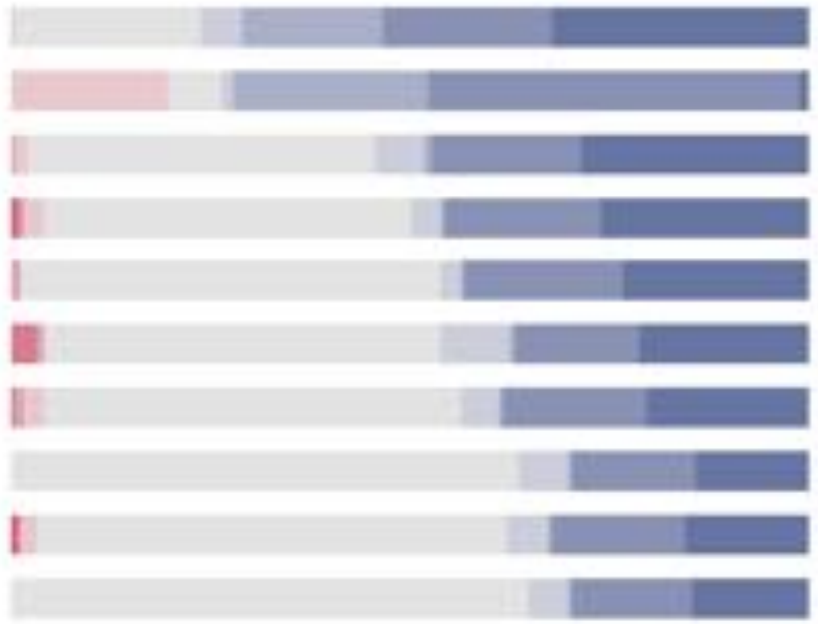
Visa Inequality | Visa From | Visa To

SORT BY

Inequality Score

Malaysia
Total 62 (32%) Countries
have an advantage (++++)

RANK	COUNTRY	CONTINENT	TRAVEL VISA INEQUALITY
1	United States	North America	
2	Australia	Oceania	
3	Canada	North America	
4	New Zealand	Oceania	
5	Japan	Asia	
6	United Arab Emirates	Asia	
7	Brunei	Asia	
8	Saudi Arabia	Asia	
9	Mexico	North America	
10	Russia	Europe	



Vis #6

https://youtu.be/p1GBFRepUNI

An Analysis of the Beatles?

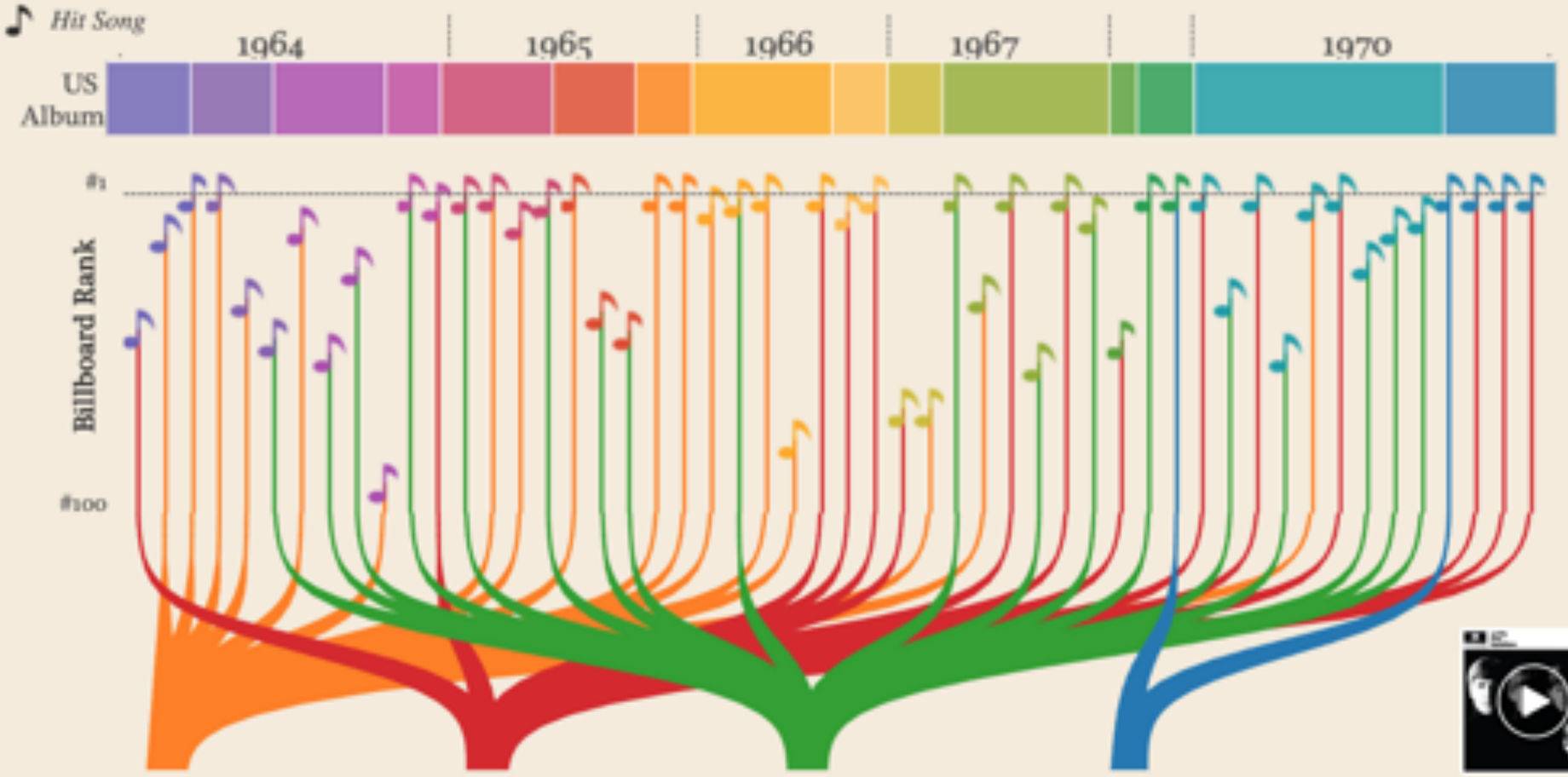
- Yik Hei Navie Chan
- 20047652

An Analysis of the Beatles?

The Beatles released a total of **310** songs as group. Of those **235** were written by one or more Beatle. This analysis focuses on the time between 1964 and 1970 when the Beatles released **18** albums & **175** songs. Within that span they had **52** top 100 hits in the US and **21** #1 hits. *Source: Wikipedia*

What Were Their Biggest Hits?

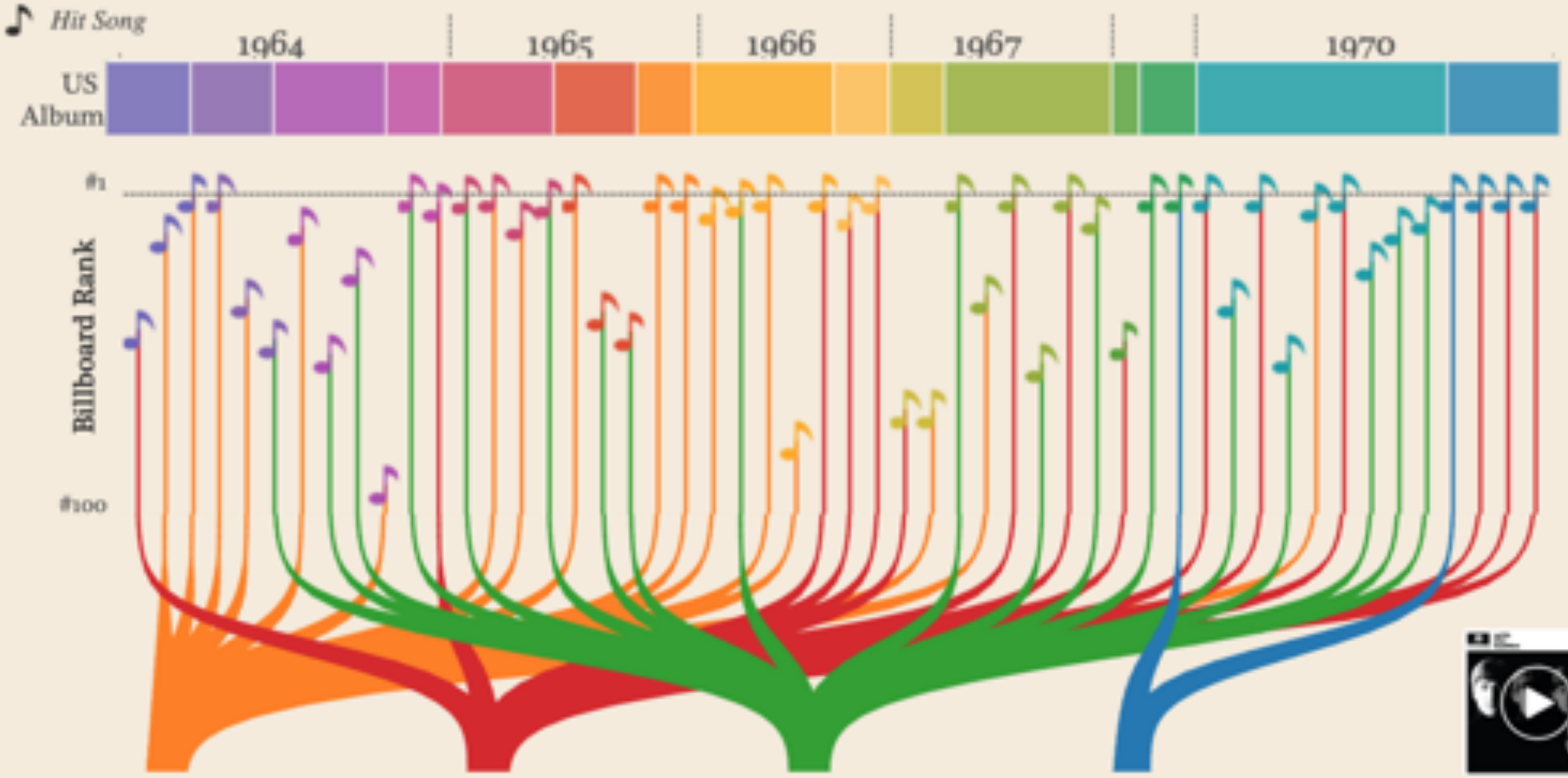
This list shows top 100 U.S. hits written by the Beatles excluding covers or albums after *Let it Be*.



Who Wrote Most of Their Songs?

What Were Their Biggest Hits?

This list shows top 100 U.S. hits written by the Beatles excluding covers or albums after *Let it Be*.



Who Wrote Most of Their Songs?

Lennon, McCartney or some combination wrote 86% of all Beatle's songs.

All Songs

Lennon & McCartney

Together Lennon &

McCartney

Paul by himself wrote 29% of all the

Lennon

John wrote the most songs (31%) and

Harrison

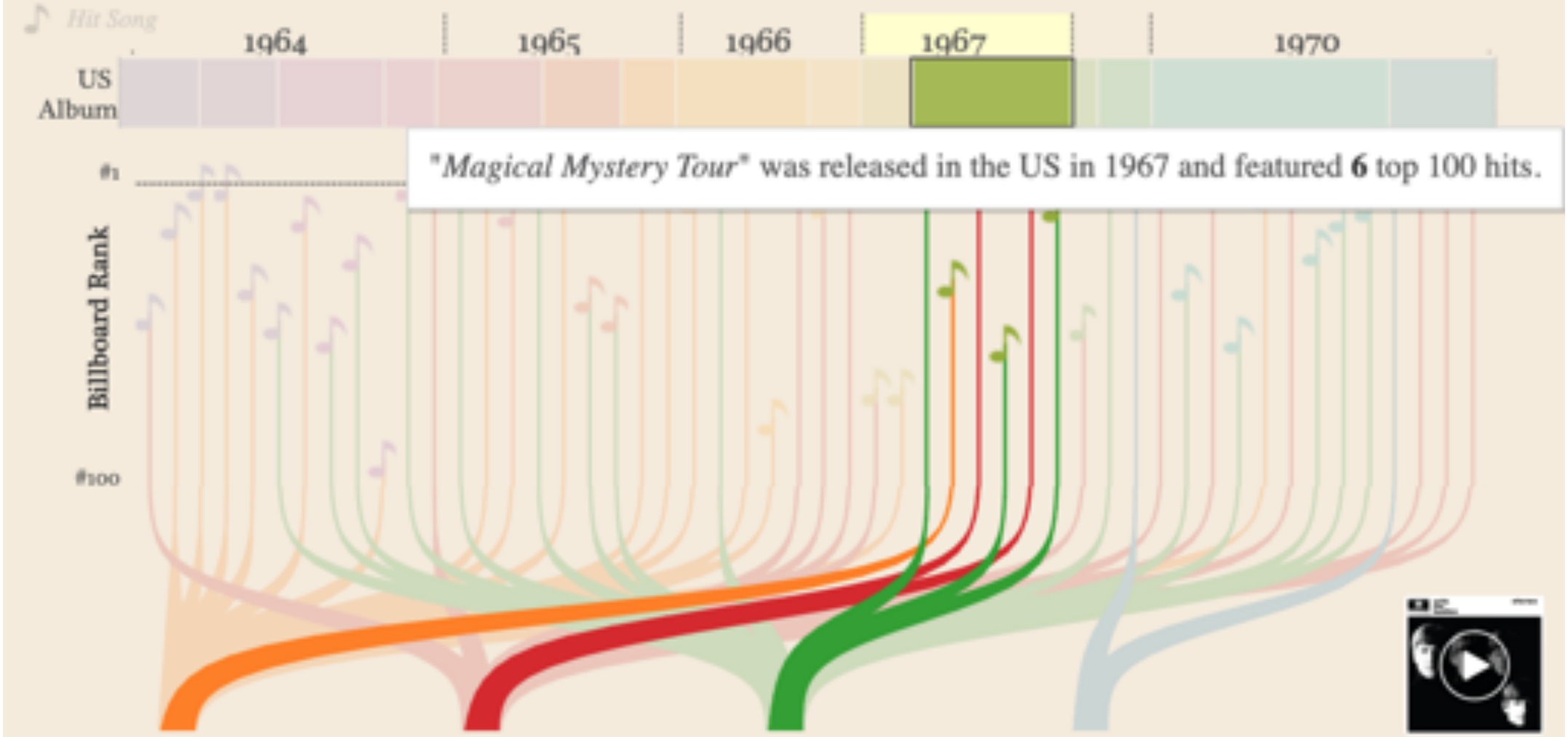
George wrote 24 songs or 12% of the

Ringo

Ringo wasn't a very prolific songwriter

What Were Their Biggest Hits?

This list shows top 100 U.S. hits written by the Beatles excluding covers or albums after *Let it Be*.



Who Wrote Most of Their Songs?

Lennon, McCartney or some combination wrote 86% of all Beatle's songs.

All Songs

Lennon & McCartney

Together Lennon &

McCartney

Paul by himself wrote 29% of all the

Lennon

John wrote the most songs (31%) and

Harrison

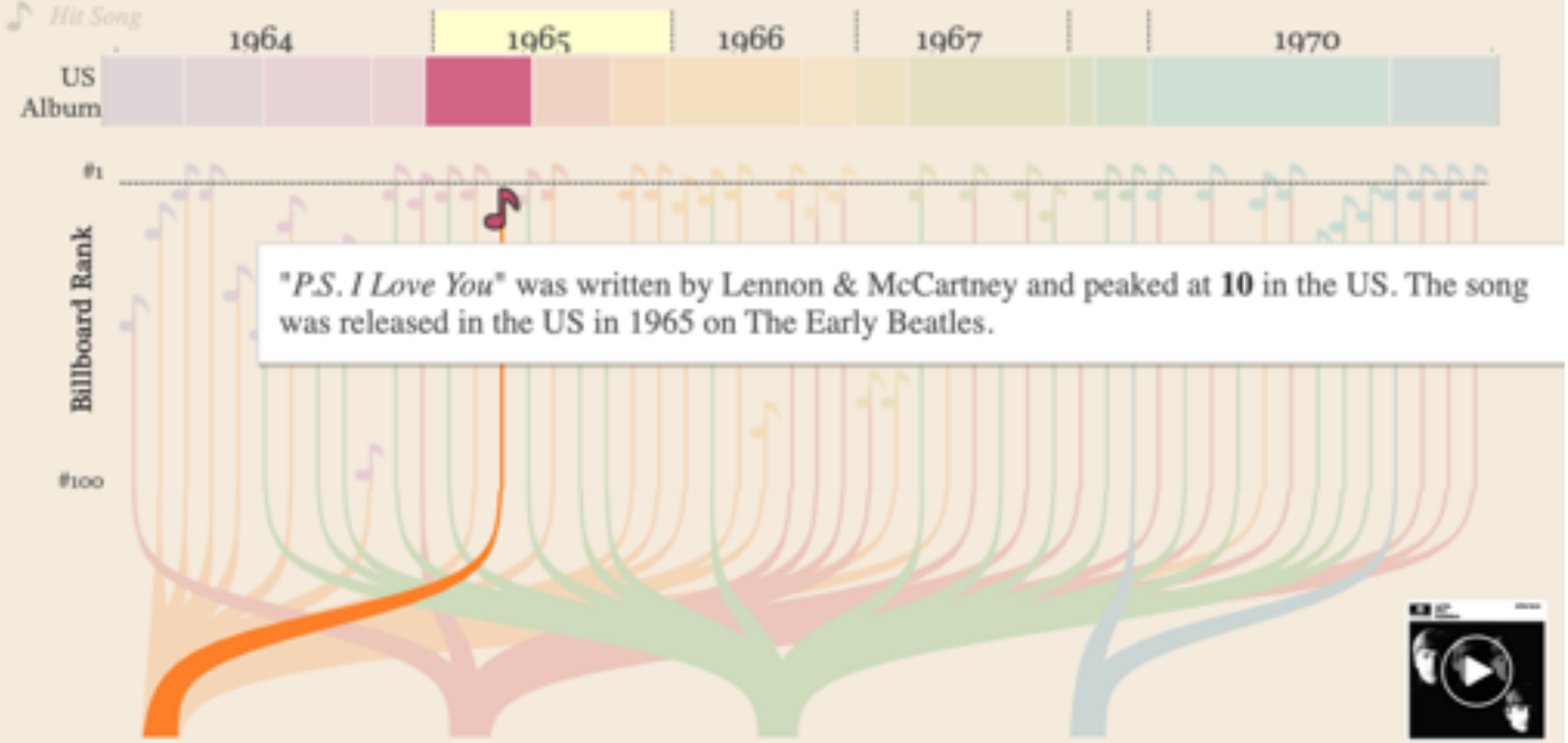
George wrote 24 songs or 12% of the

Ringo

Ringo wasn't a very prolific songwriter

What Were Their Biggest Hits?

This list shows top 100 U.S. hits written by the Beatles excluding covers or albums after ***Let it Be***.

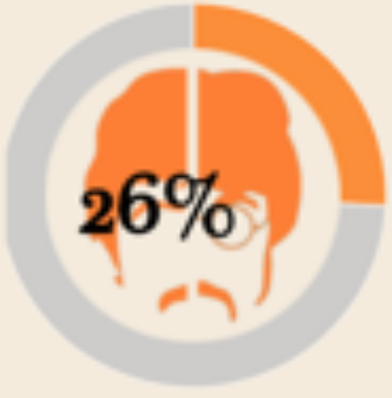


"*P.S. I Love You*" was written by Lennon & McCartney and peaked at **10** in the US. The song was released in the US in 1965 on The Early Beatles.

Who Wrote Most of Their Songs?

Lennon, McCartney or some combination wrote 86% of all Beatle's songs.

All Songs



Lennon & McCartney

Together Lennon &

McCartney

Paul by himself wrote 29% of all the

Lennon

John wrote the most songs (31%) and

Harrison

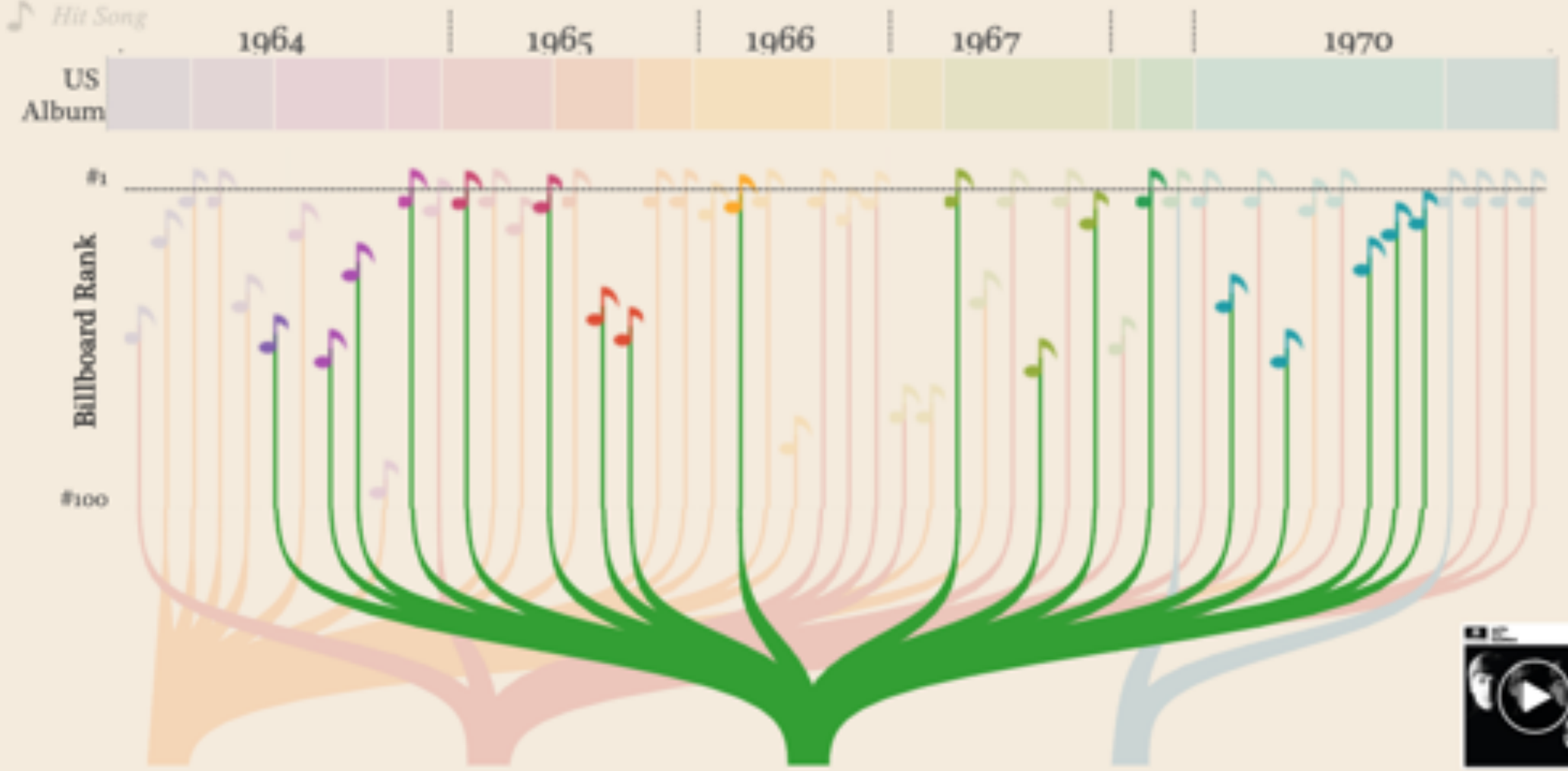
George wrote 24 songs or 12% of the

Ringo

Ringo wasn't a very prolific songwriter

What Were Their Biggest Hits?

This list shows top 100 U.S. hits written by the Beatles excluding covers or albums after *Let it Be*.



Who Wrote Most of Their Songs?

Lennon, McCartney or some combination wrote 86% of all Beatle's songs.

All Songs

Lennon wrote **31%** of the Beatles' songs or a total of 61 songs.

Lennon & McCartney
Together Lennon &

McCartney
Paul by himself wrote 29% of all the

Lennon
John wrote the most songs (31%) and

Harrison
George wrote 24 songs or 12% of the

Ringo
Ringo wasn't a very prolific songwriter

impressive

- Good use of color - Similar colors for albums/songs to indicate the release dates. Distinctive colours for artists

- Curve and tree-stem-like lines to help viewers to trace

- Interaction - Hover an album, song or artist to reveal related one-line summary. Highlight the stem and grey out the others to help tracing

- Base line at #1 - To helper viewers identify the #1 songs

- Simplified data - Only to show the top songs within a pre-defined timeframe

Source

- https://public.tableau.com/profile/adam.e.mccann#!/vizhome/BeatlesAnalysis/BeatlesAnalysis

Vis #7

https://youtu.be/ZpCWxx77q2c

An Illustrated Guide to All 6,887 Deaths in “Game of Thrones”

CHEN Chen
20619546

https://www.washingtonpost.com/graphics/entertainment/game-of-thrones/

Deaths by Season

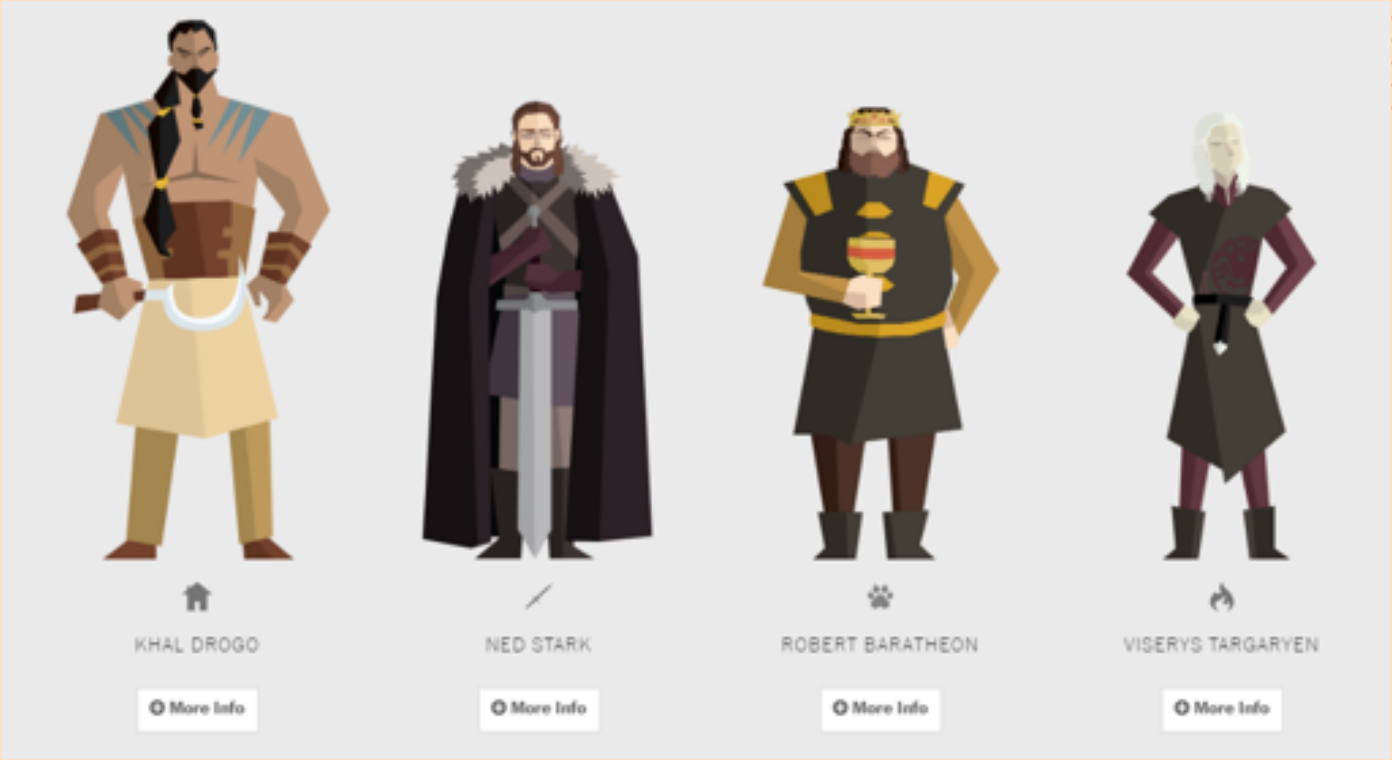
“Valar Morghulis” — All Men Must Indeed Die

Show Every On-Screen Death from “Game of Thrones,” Including Who, When, How, Why and Where in Every Season

Season 1

59 Deaths

Protagonists



Season 1

59 Deaths

Protagonists

#34 ROBERT BARATHEON

More Info

ICON
Method of Death. Hover over Each ICON for Details

Character Image/“More Info” Button
Click on it to See More Information on When, How, Why and Where a Character Was Killed

Season 1

59 Deaths

Protagonists

#34 ROBERT BARATHEON

Who, When, How, Why and Where

Death #34

ROBERT BARATHEON

Allegiance: House Baratheon of King's Landing

When: Season 1, Episode 7

Where: King's Landing

Killer: Boar

Method: Tusk

Method category: Animal

Reason: Hunted the boar while drunk

Season 1

59 Deaths

Supporting Characters

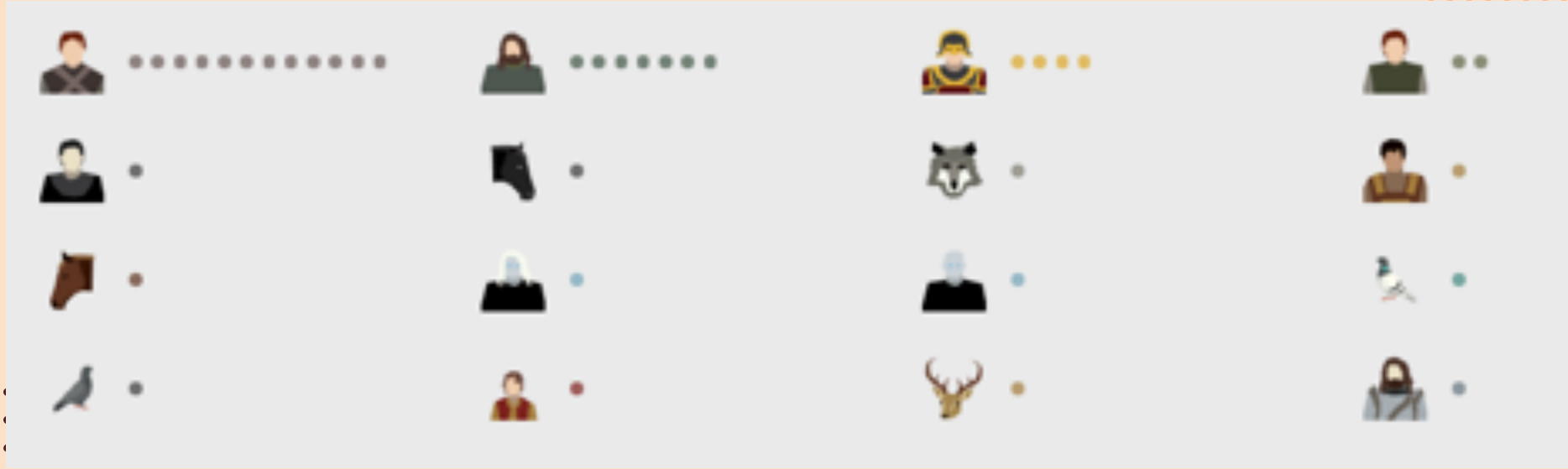
Avatar ICON

Click on it to See More Information on How, Why and Where a Character Was Killed

Season 1

59 Deaths

Soldiers/Animals

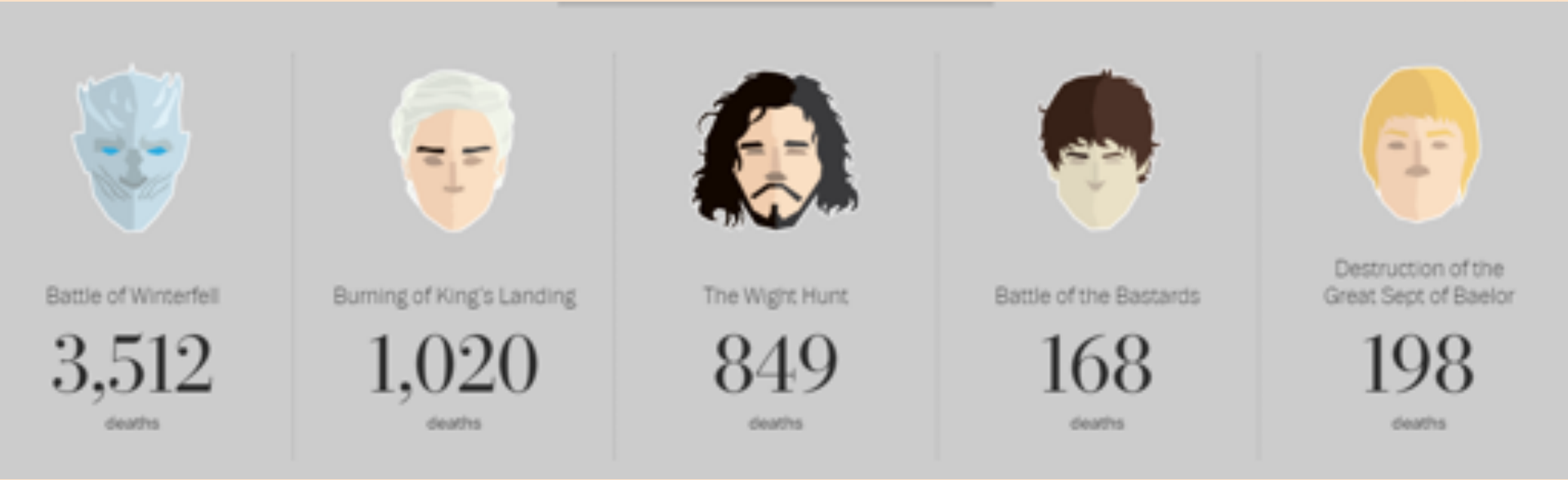


The Deadliest Locations

The Deadliest Locations Shown on Map

The Deadliest Weapon Categories

The Deadliest Battles



The Deadliest Killers

Drogon

1,426

kills

Deadliest weapon: Dragonfire

Most on-screen kills:
Burning of King's Landing
S8, E5 (918 kills)

Notable kill:
Destroying King's Landing and everyone within, Lannisters and soldiers alike
S8, E5

Arya Stark

1,278

kills

Deadliest weapon: Valyrian steel dagger

Most on-screen kills:
Battle of Winterfell
S8, E3 (1,214 kills)

Notable kill:
Killing the Night King and defeating the entire army of the dead
S8, E3

Rhaegal

273

kills

Deadliest weapon: Dragonfire

Most on-screen kills:
Battle on the frozen lake during the "Wight Hunt"
S7, E6 (170 kills)

Notable kill:
Burning massive hordes of wights to help Jon Snow and his "wight hunting" party
S7, E6

Cersei Lannister

199

kills

Deadliest weapon: Wildfire

Most on-screen kills:
Explosion at the Great Sept of Baelor
S6, E10 (199 kills)

Notable kill:
I mean, killing *everybody* at the Great Sept of Baelor is pretty notable
S6, E10

Jon Snow

112

kills

Deadliest weapon: Sword (Longclaw)

Most on-screen kills:
Battle on the frozen lake during the "Wight Hunt"
S7, E6 (142 kills)

Notable kill:
Stabbing Daenerys Targaryen after a final kiss goodbye
S8, E6

THANKS

CHEN Chen

Vis #8

https://youtu.be/iIbPhUIFfok

What people eat?

Chen Mo -20633437

Visualization from http://sketches.christianlaesser.com/2014-12-29-what-people-eat/

Contents

1.Data Description

2.Encoding Scheme

3.Evaluation

4.Conclution

Data Description

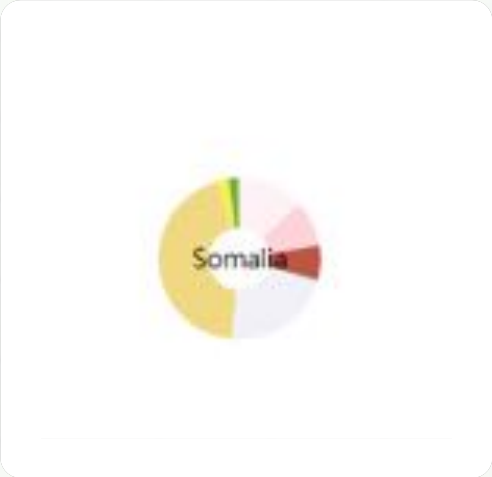
Data description

OVERVIEW

- The calories people eat per day in 179 countries or districts.
- Containing 9 attributes

Encoding Scheme

Encoding scheme



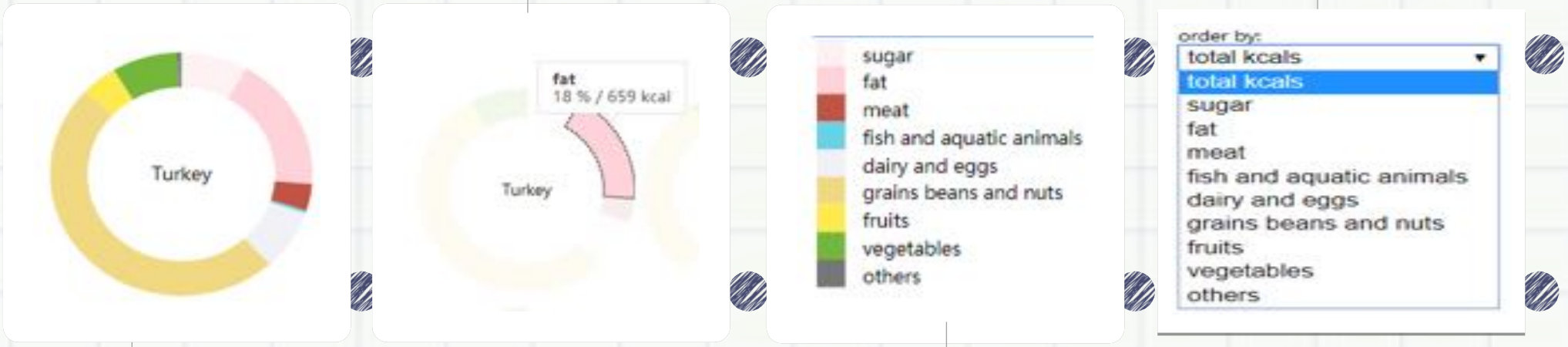
Size: total calories
Color: different categories
Arc length: proportion
Letter in bar chart: countries or districts

Evaluation

Why impressive?

Zoom in to get precise value

Interactive---filter what users are interested in



Expressive and effective magnitude channels to display ordered attributes
--- Size/Length

Expressive and effective identity channels to show Categorical Attributes
--- Color hue(within 10)

Conclusion

Conclusion

01 Aesthetic---color hue

02 Interactive---apply filter

03 Effective---high rank channel

04 Intuitive---clearly convey info

05 Comparative---pie chart size/order by

THANKS FOR LISTENING!

Vis #9

https://youtu.be/ObejgZqGg6I

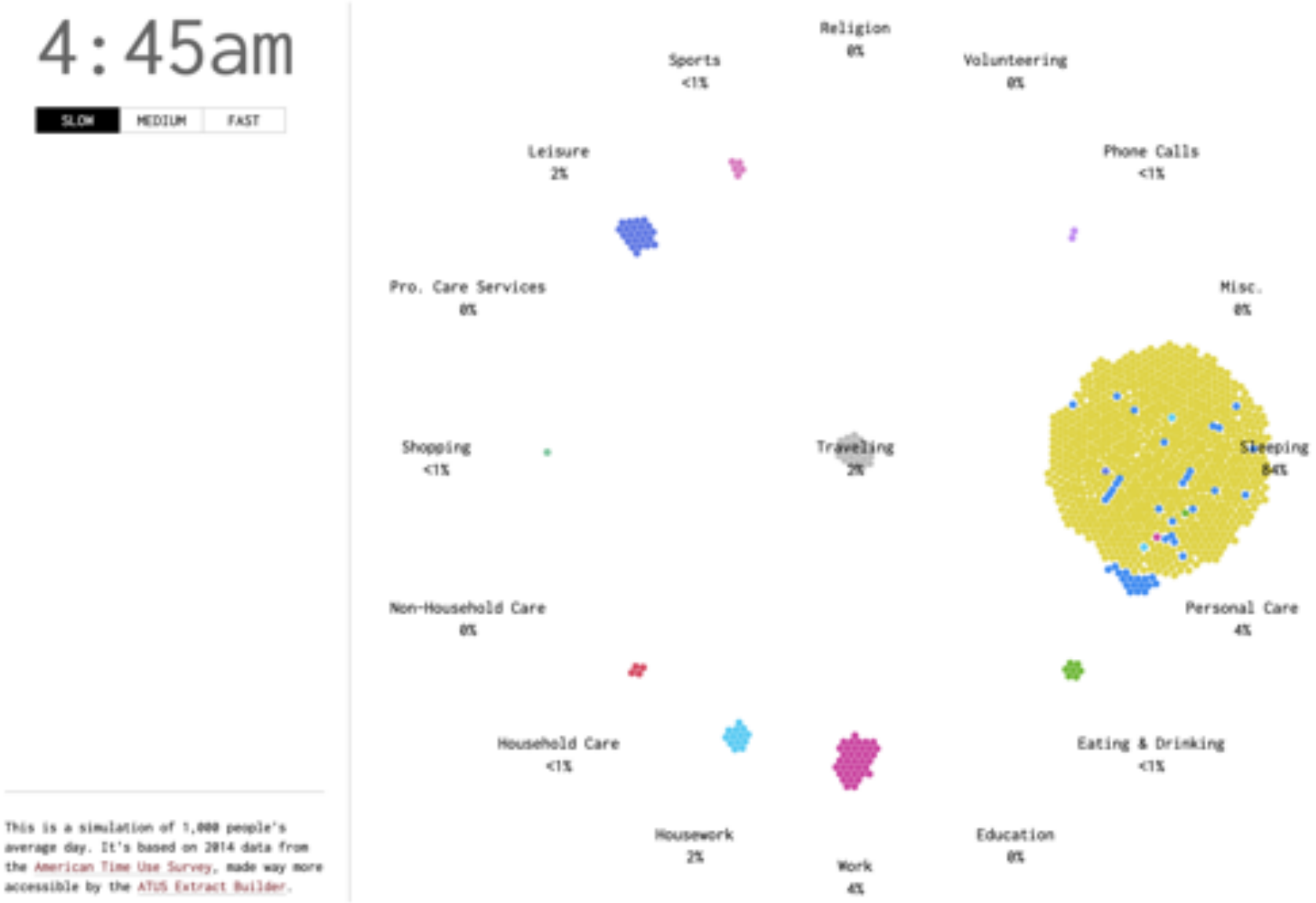
A Day in the Life of Americans

——This is how America runs

MSBD 5005 Top VIS Competition

CHEN, Pengyao 20616714

Top VIS

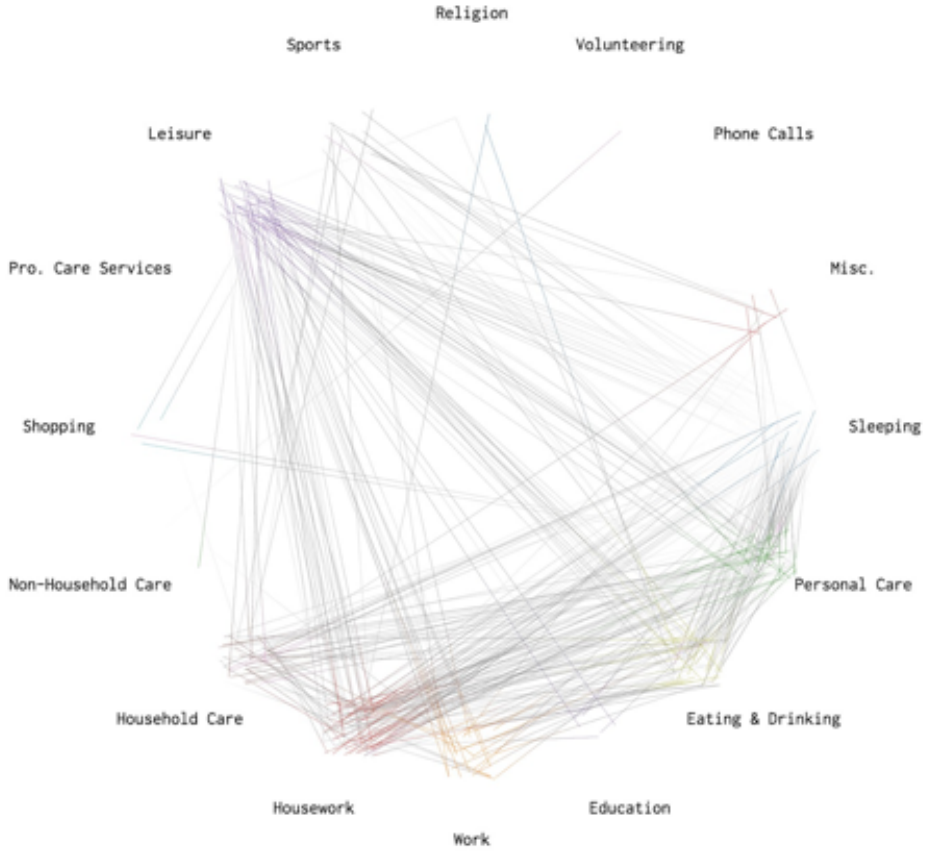

4:45am
SLOW
MEDIUM
FAST
Religion
0%
Sports
<1%
Volunteering
0%
Leisure
2%
Phone Calls
<1%
Pro. Care Services
0%
Misc.
0%
Shopping
<1%
Traveling
2%
Sleeping
84%
Non-Household Care
0%
Personal Care
4%
Household Care
<1%
Eating & Drinking
<1%
Housework
2%
Work
4%
Education
0%
This is a simulation of 1,000 people's average day. It's based on 2014 data from the American Time Use Survey, made way more accessible by the ATUS Extract Builder.

Top VIS

Top VIS

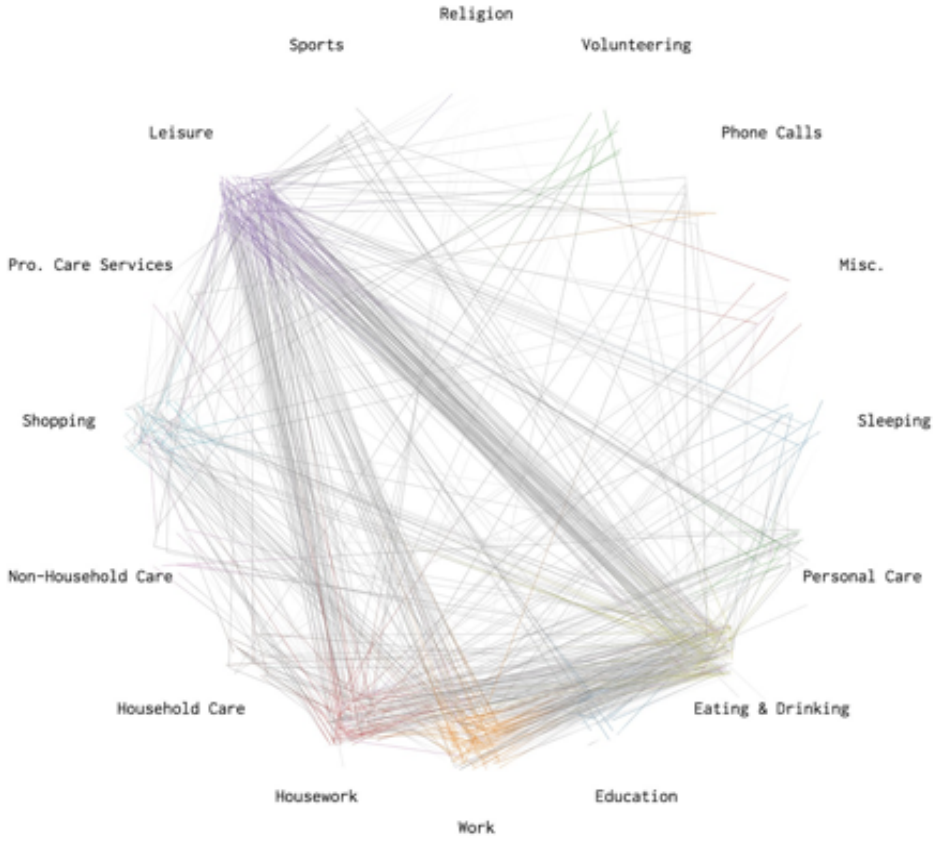
Waking up

Between 6:30am and 7:30am, most people wake up, head into personal care such as showering and brushing teeth, and then head to work, eat breakfast, relax for a bit, and do housework.

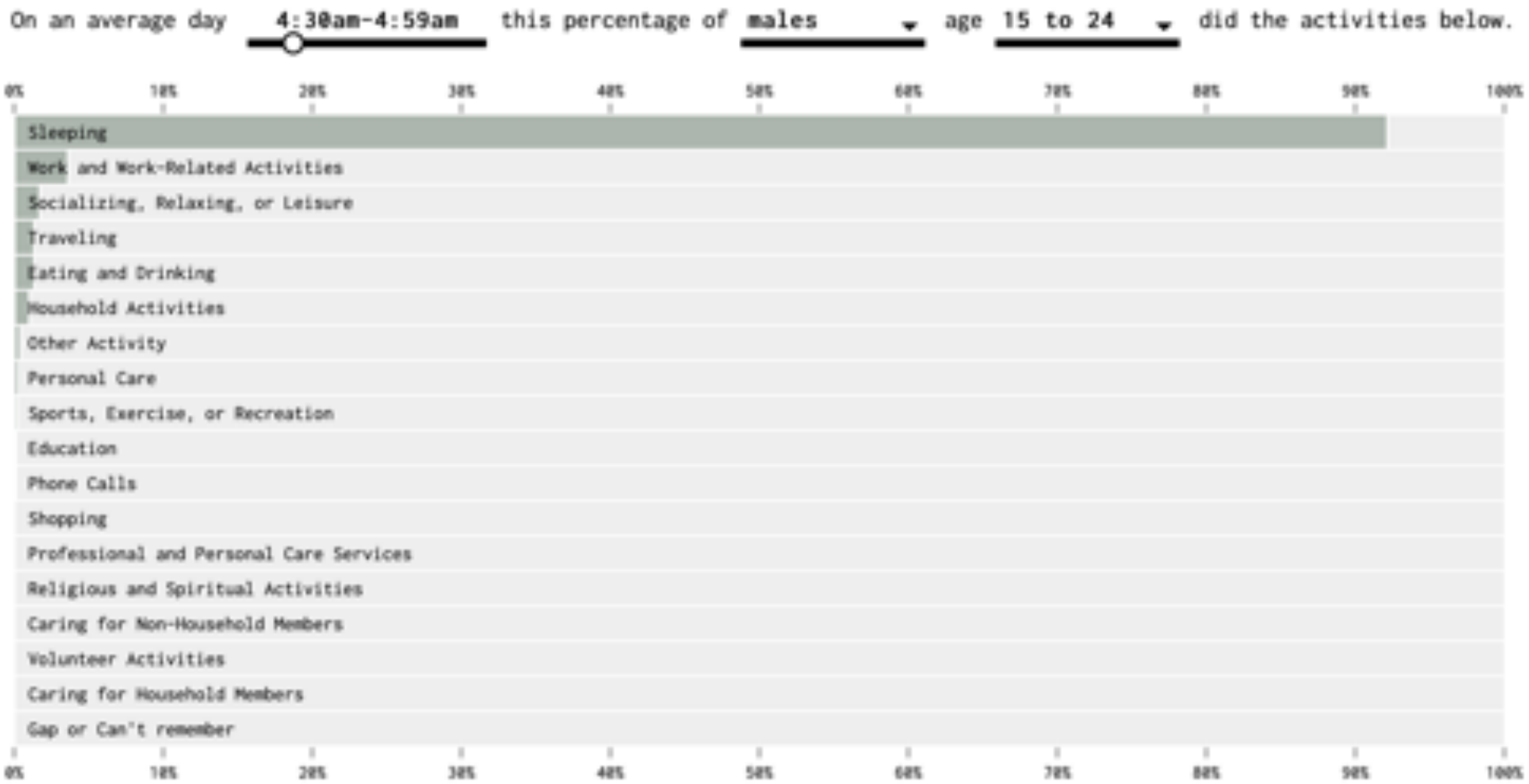


Lunch hour

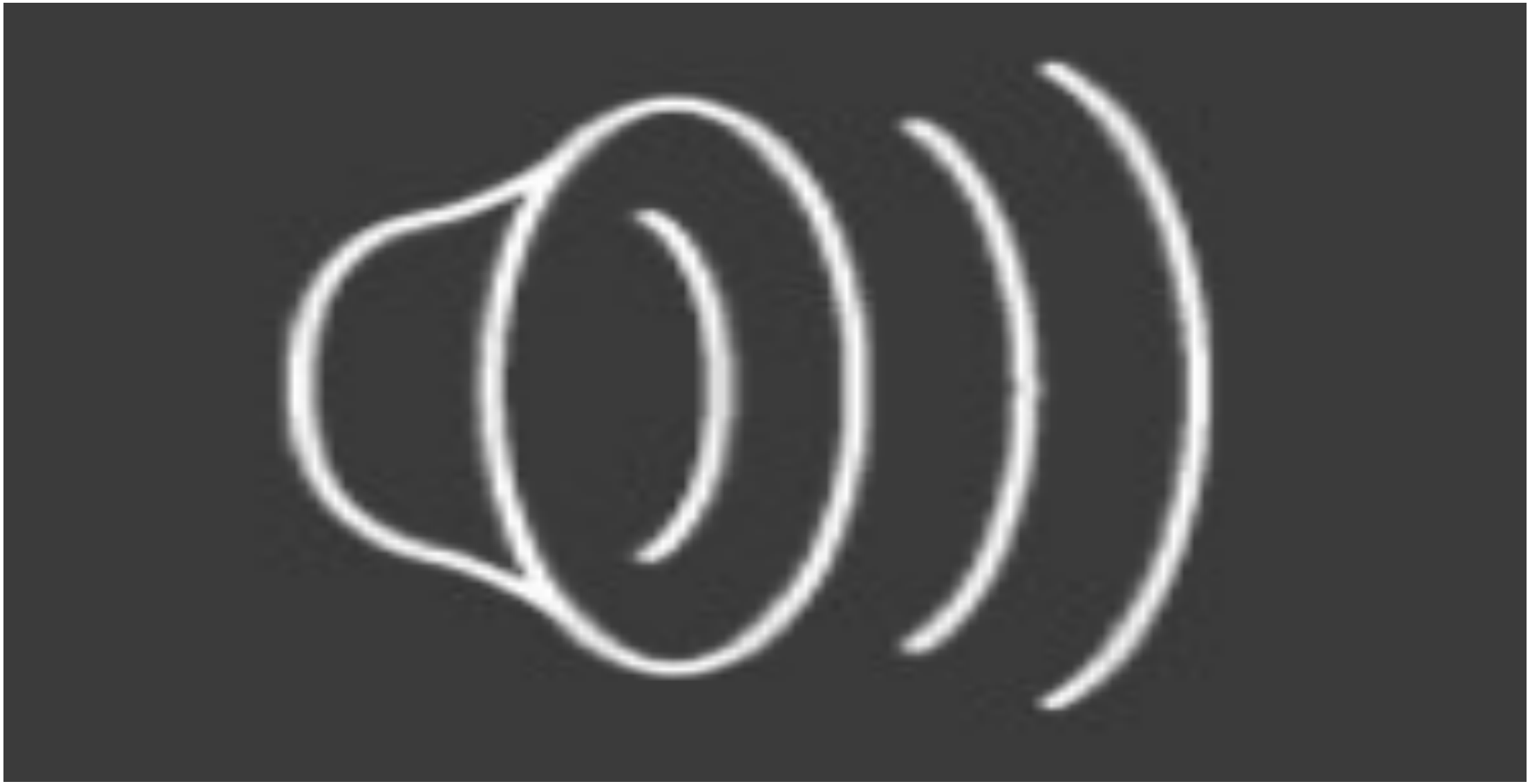
From noon to 1:00pm, you see a lot of movement from work or housework to eating and drinking and then back again. Many also take the time to relax.



Top VIS


On an average day
4:30am-4:59am
this percentage of
males
age
15 to 24
did the activities below.
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Sleeping
Work and Work-Related Activities
Socializing, Relaxing, or Leisure
Traveling
Eating and Drinking
Household Activities
Other Activity
Personal Care
Sports, Exercise, or Recreation
Education
Phone Calls
Shopping
Professional and Personal Care Services
Religious and Spiritual Activities
Caring for Non-Household Members
Volunteer Activities
Caring for Household Members
Gap or Can't remember

Top VIS



Thank You for Listening !

——Voting for me please!

MSBD 5005 Top VIS Competition

CHEN, Pengyao 20616714

Vis #10

https://youtu.be/a8xGJ0L11bs

Profiles of a Divided Country

Top Vis Competition

CHEN Ruifeng

Background

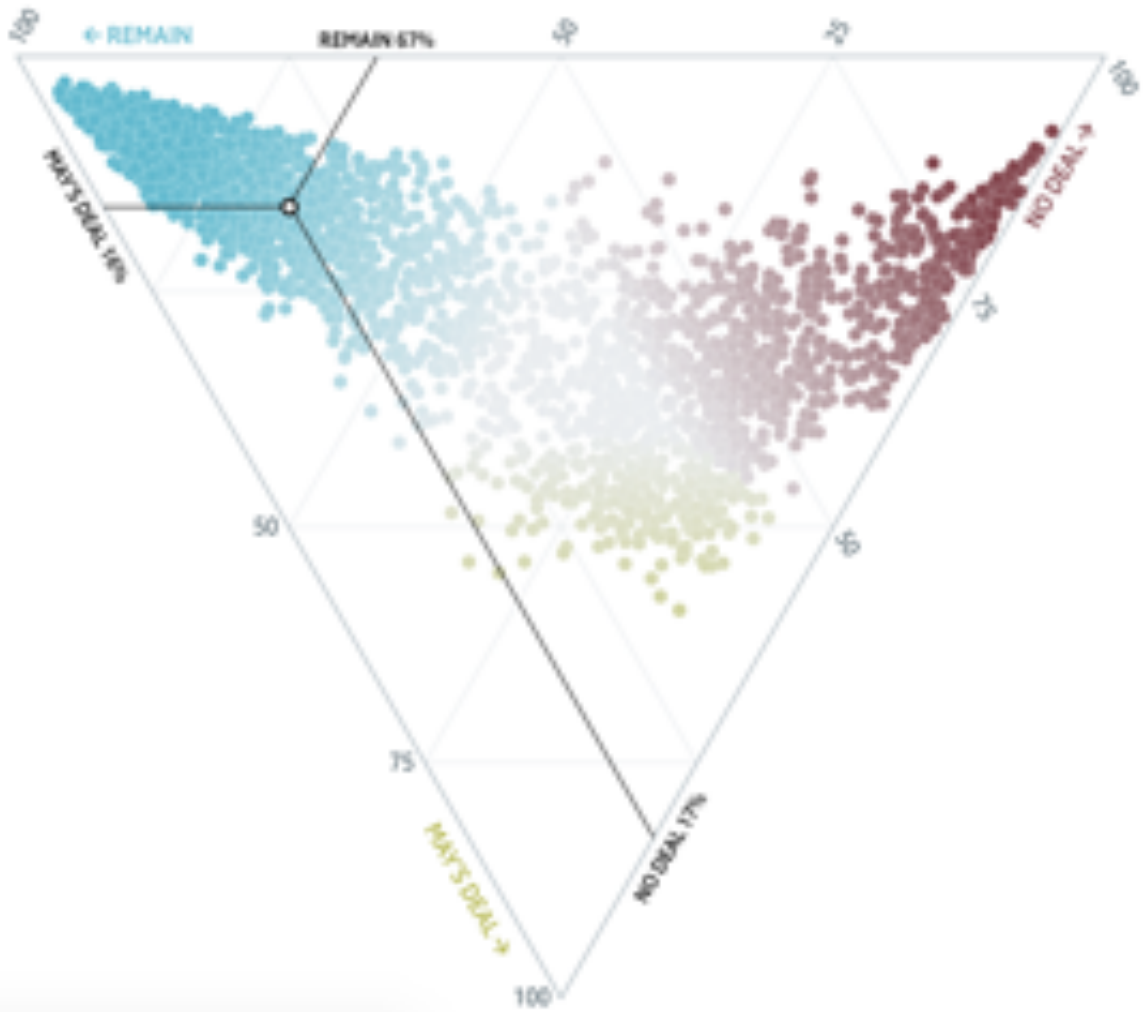
- YouGov, a pollster, asked 90,000 British adults late last year what they thought about Brexit.
- *The Economist* built a demographic model using these data to calculate an individual's probable attitude to each of three possible Brexit options:
  - no deal
  - Mrs May's deal
  - remaining in the EU

Variables

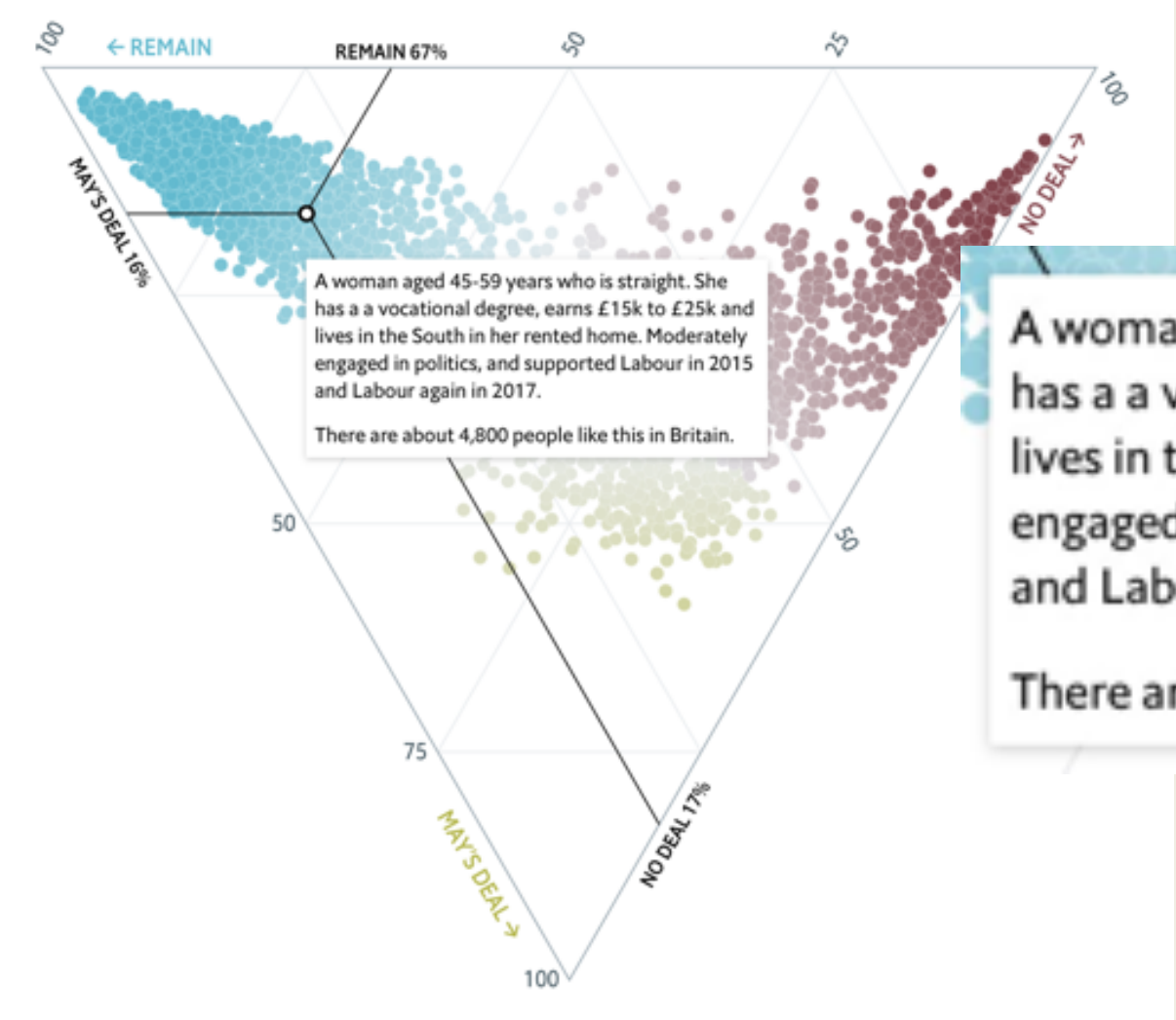
Variable	Description
sex	female / male
age_bucket	age grouped into five buckets
lgbtq	sexuality. straight; other
inc_bucket	total gross household income
educ_n	coded 1-5. 1 = no formal qualifications; 2 = secondary school; 3 = further educ; 4 = graduate; 5 = post-graduate
region6	region of GB, split six ways
tenure3	housing tenure. own home outright; mortgaged home; rent
poli_int_bucket	political interest: low; middling; high
…	

Overview

Build a British voter
randomise
A woman aged between 45 and 59 years old who is straight. She has a household income of £15k to £25k, a vocational degree and lives in the South in her rented home. She is moderately engaged in politics, supported Labour in 2015 and Labour again in 2017.
Likelihood of voting
67%
Remain
16%
May's deal
17%
No deal


← REMAIN
REMAIN 67%
MAY'S DEAL 16%
NO DEAL →
NO DEAL 17%
MAY'S DEAL →
25
50
75
100

Profiles

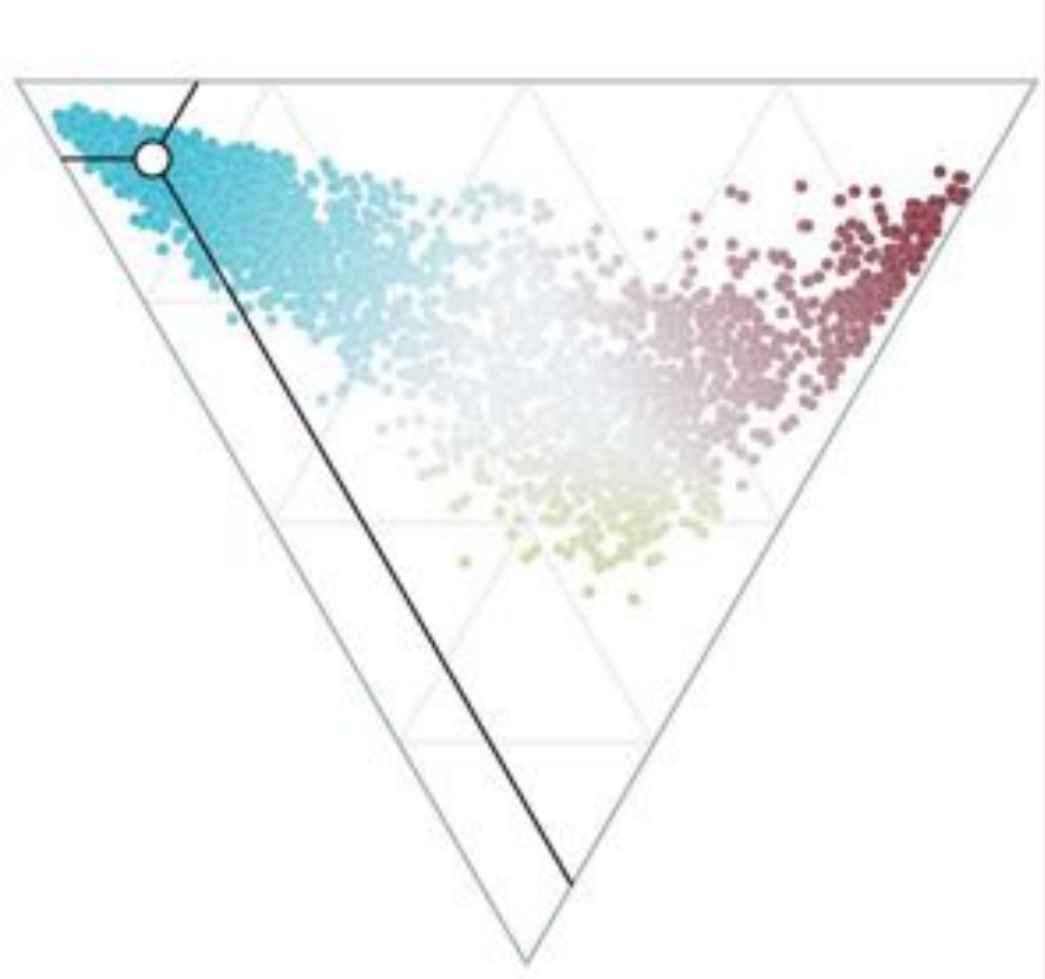


tell stories

A woman aged 45-59 years who is straight. She has a a vocational degree, earns £15k to £25k and lives in the South in her rented home. Moderately engaged in politics, and supported Labour in 2015 and Labour again in 2017.

There are about 4,800 people like this in Britain.

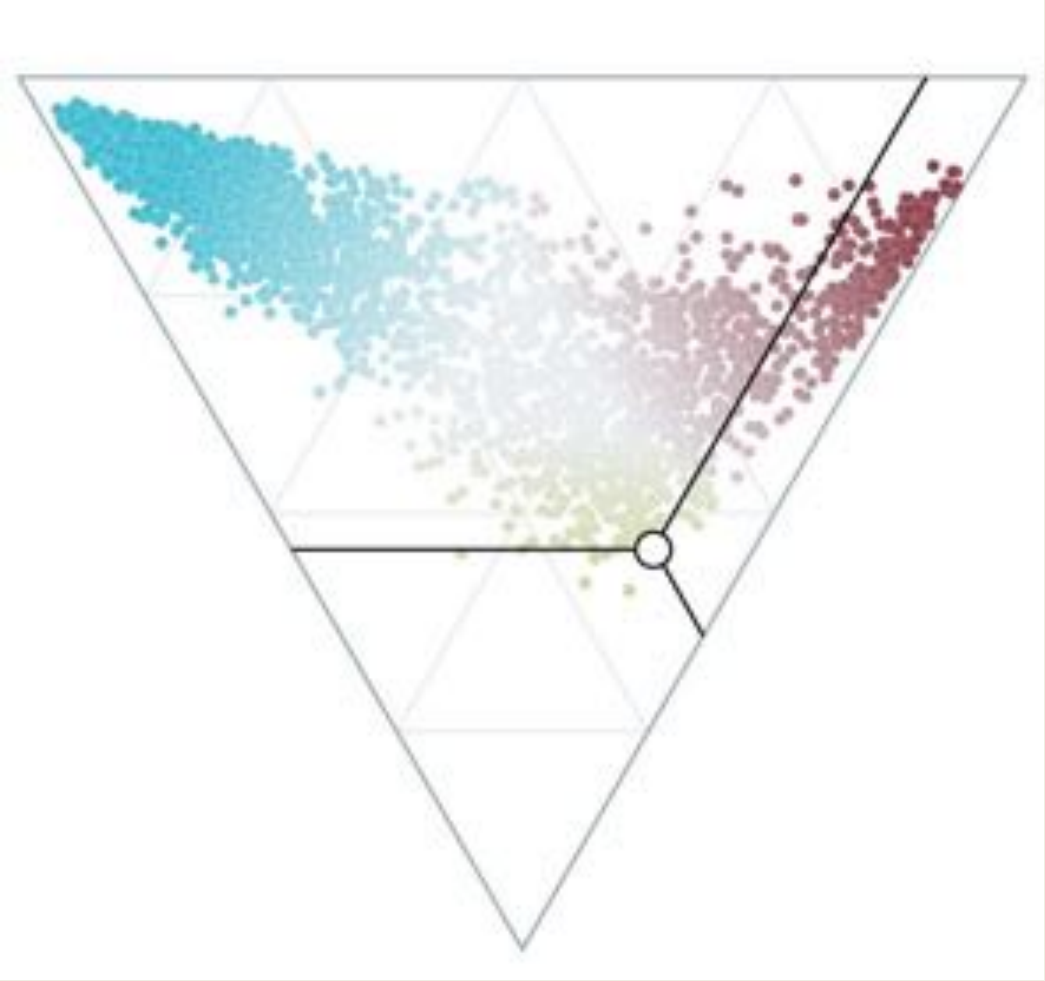
Analysis



A typical remain supporter

A man aged 36 with a university degree who is straight. He has a household income of £40,000 a year and lives in the North in a mortgaged home. Moderately interested in politics, he voted Labour in 2015 and 2017.

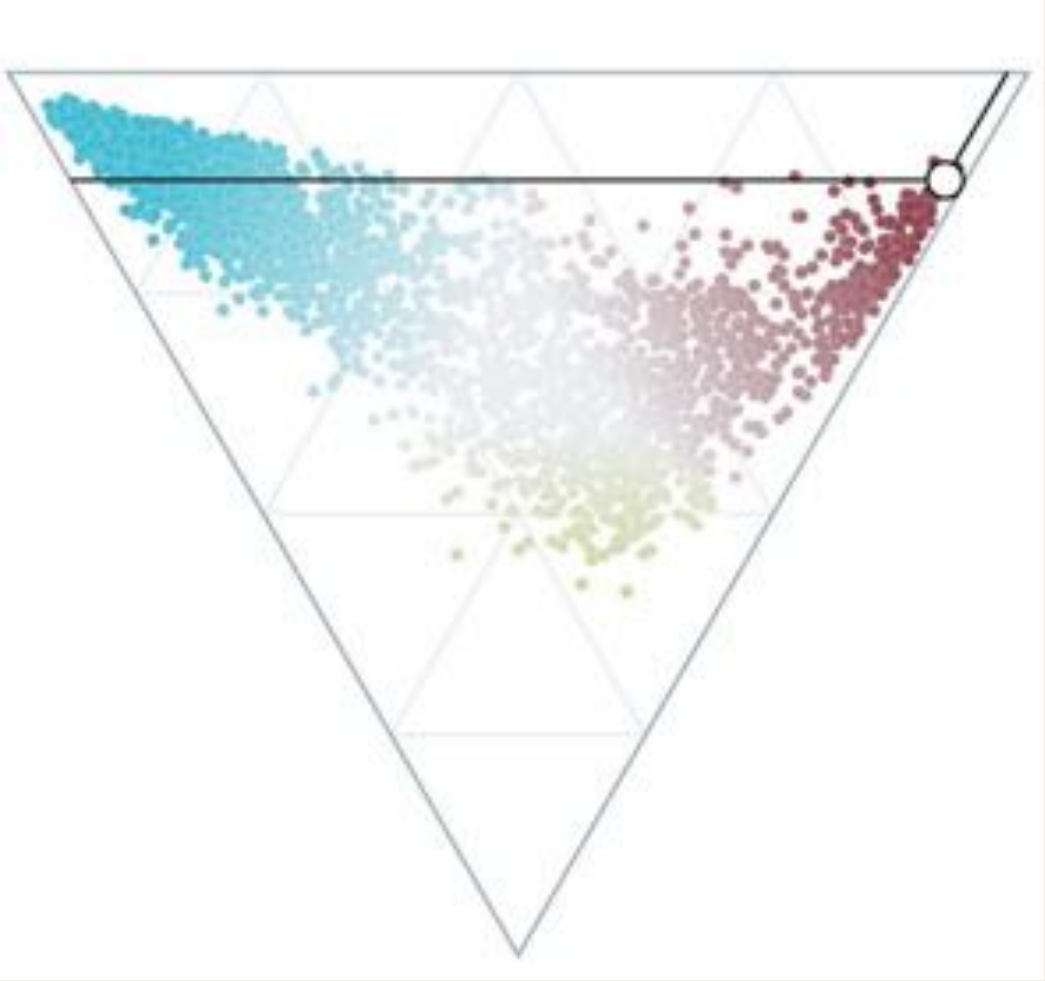
Analysis



A typical deal supporter

A woman aged 63 with a secondary-school education who is straight. She has a household income of £20,000 a year and lives in the Midlands in her own home. Uninterested in politics, she voted Conservative in 2015 and 2017.

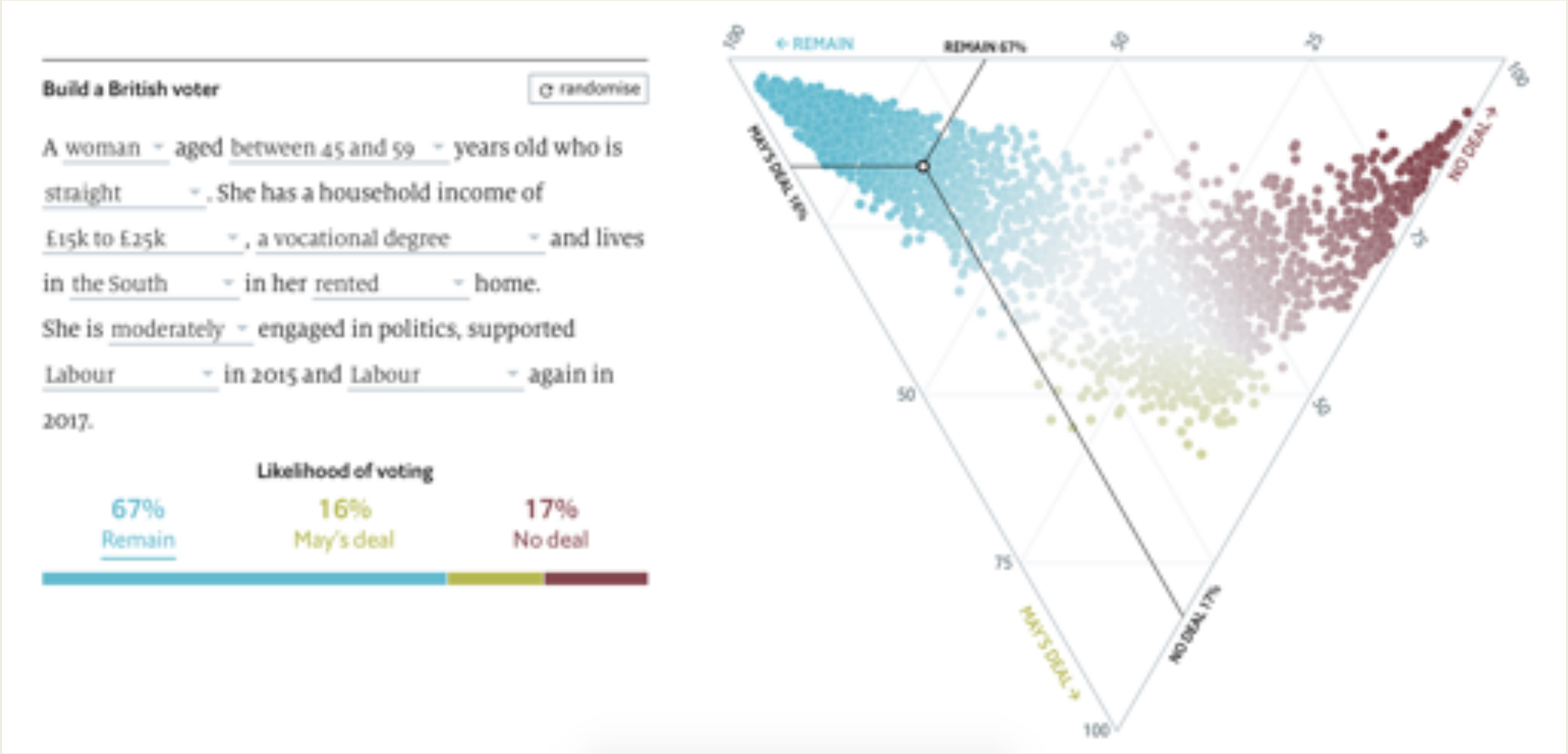
Analysis



A typical no-deal supporter

A man aged 68 with a vocational degree who is straight. He has a household income of £30,000 a year and lives in the South in his own home. Very interested in politics, he voted UKIP in 2015 and Conservative in 2017.

Thanks



https://www.economist.com/graphic-detail/2019/02/22/profiles-of-a-divided-country

Vis #11

https://youtu.be/8qHXPRiIPgM

Cui Yaxin

My favorite Visualization: Solar Eclipse

Introduction

Details

Why do I like it

Introduction

I was born in the year

year

- We can get this visualization finished in 2017 through this website:
  https://www.washingtonpost.com/graphics/national/eclipse/?utm_term=.18c8901fbe90
- The author is Denise Lu.
- This Visualization shows every total solar eclipse happening in your lifetime
- Input the year you were born, get the visualization

Details

I was born in the year

1997

See eclipses

If you were born in **1997**, you are (or will be) **20** this year. If you live to be 100, there will be **56** more total solar eclipses worldwide in your lifetime. Many will be over **Asia**. **Three** will only eclipse over water.

2017 AUGUST 21 Sooner Later

Drag the globe to explore the eclipse paths.

Viewers could see more information about total solar eclipse after the main visualization

Why I like it

Why I like it

The color it use

This Visualization only use orange and gray

Orange: 2017 eclipse

Dynamic Geographic Display

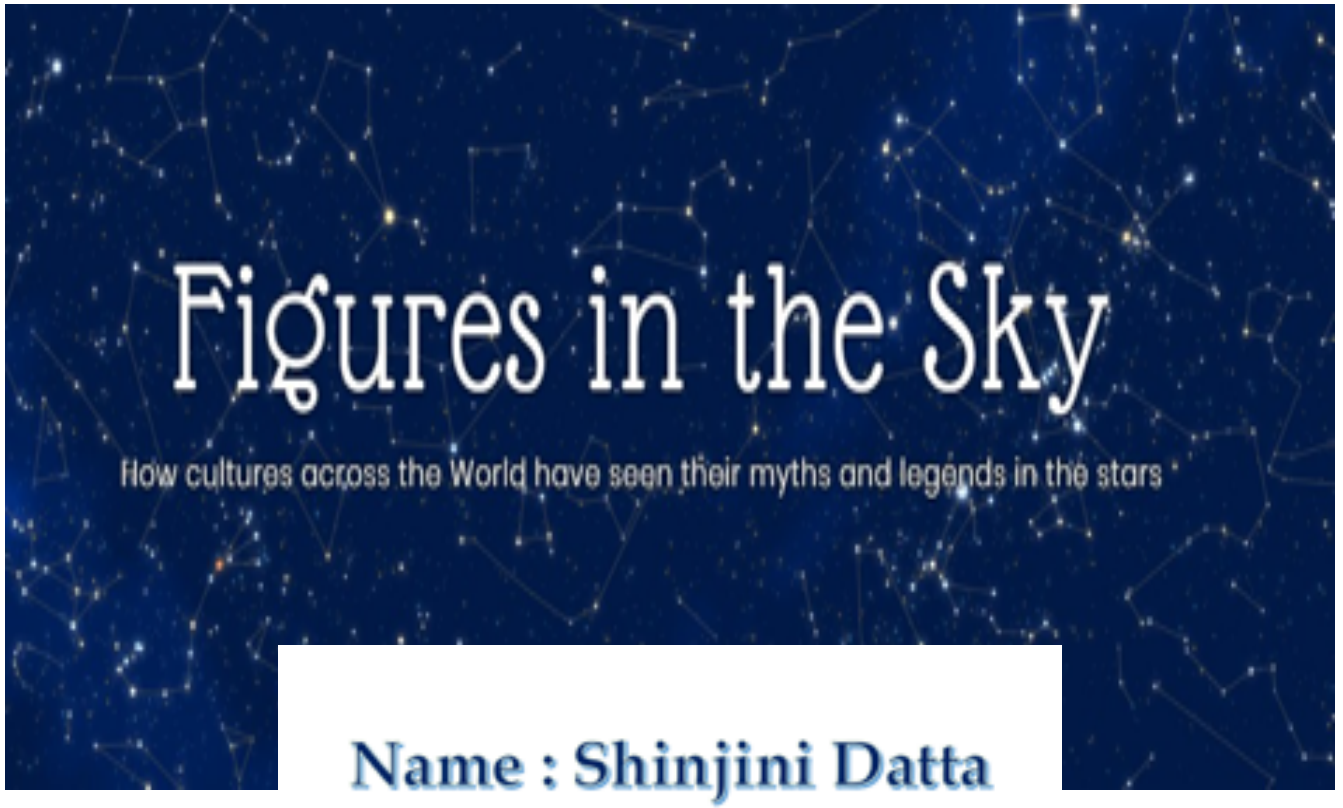
Display geographic information naturally

Drag the globe I could see the whole world

Time Encode

Time encoded by gray-scale

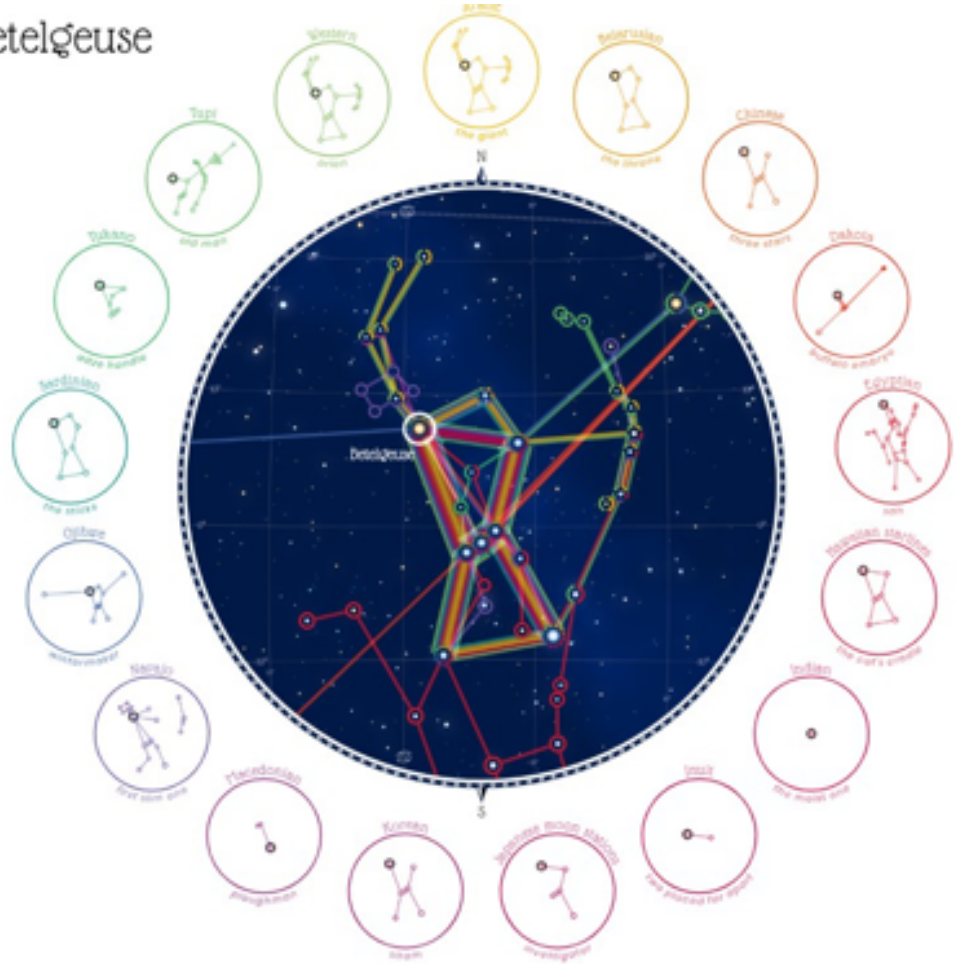
Vis #12



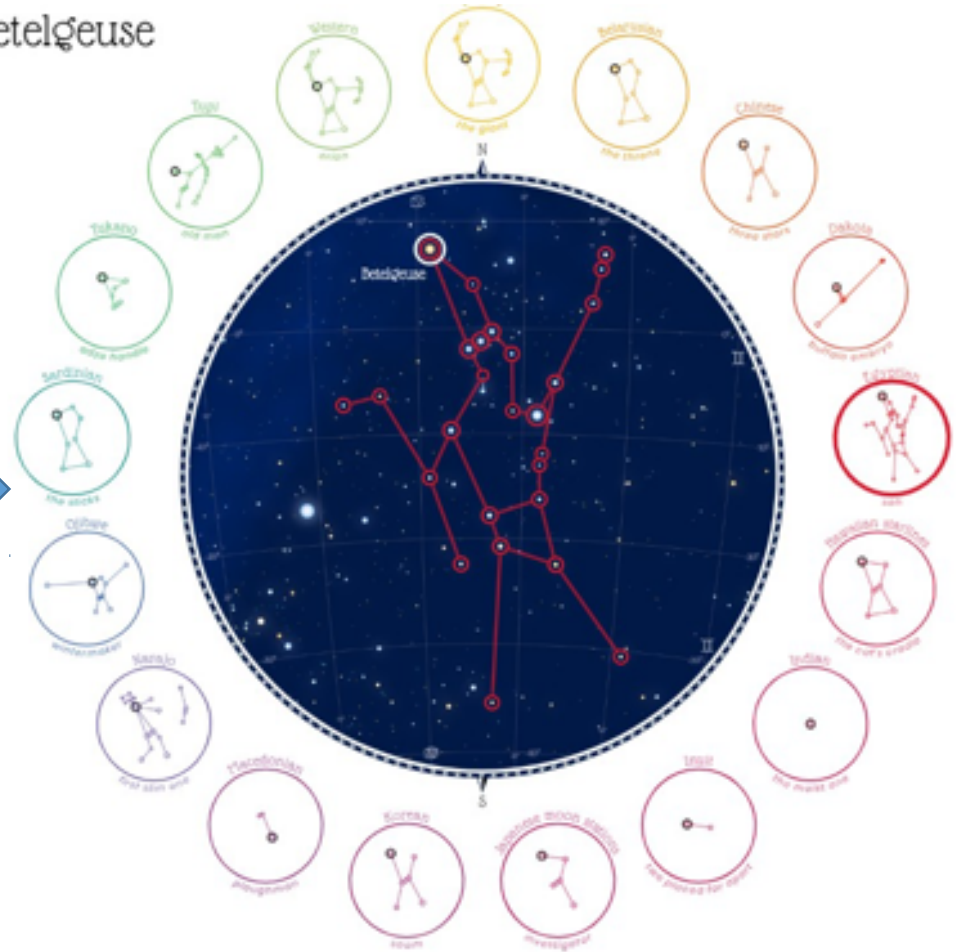
Name : Shinjini Datta

ID : 20650057

Betelgeuse



Betelgeuse



Acrux

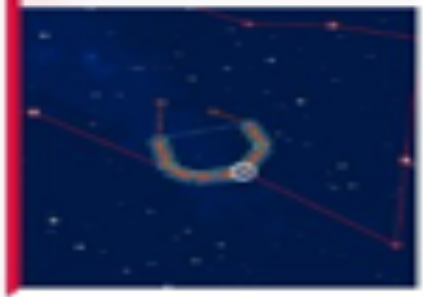
Located in the Southern Cross constellation, quite near the South Pole

Aldebaran

Part of Taurus, this star is used most often across cultures after Orion's 'belt'

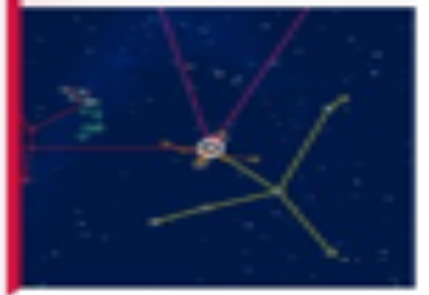
Alphekka

A great number of things are seen in this half circular 'Corona Borealis'



Altair

This star is easiest to find as the bottom of the 'Summer Triangle'



Aludra

This far-away star shines more than 170,000 times brighter than the Sun

Atlas

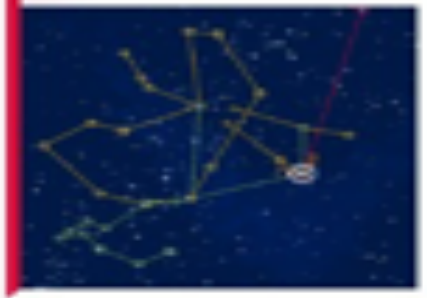
Part of the Pleiades, a tightly packed 'star cluster' of 9 relatively bright stars

Antares

A distinctly red star that is known by many cultures as The Heart

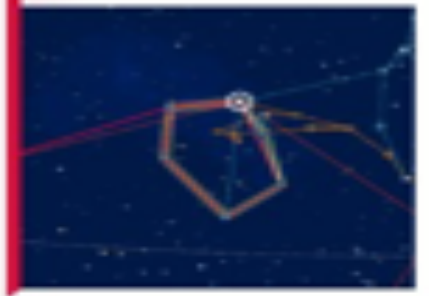
Canopus

The second brightest star, but no clear shape appears across cultures



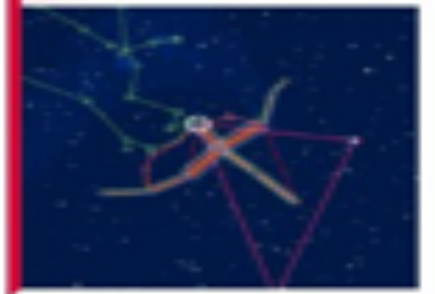
Capella

Interestingly known as 'the Goat star' across several cultures



Deneb

Meaning 'tail', it belongs to both the Swan & the Summer Triangle



Mirphak

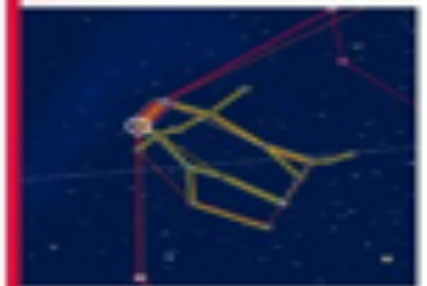
Ascribed to fascinating animal shapes, such as a puma, deer, elk and bird

Polaris

The famous North (Pole) star and part of the Little Dipper (and Ursa Minor)

Pollux

The 'heavenly twins' (together with Castor) and the zodiac sign of Gemini



Regulus

The brightest star (actually 4 stars together) of the zodiac Leo, the Lion

Spica

Derived from 'the virgin's ear' in Latin, it's part of the zodiac constellation Virgo

The constellation information for the cultures come from Stellarium, a free and extremely popular planetarium.

There are 28 cultures included in these analyses and visuals. Especially for the more ancient cultures, only a few constellations are still known today. You can read a little more about each culture by hovering over the blocks. It's also possible to see all the constellations of the culture at once in the Sky Map above by clicking on a culture's name.

Arabic
constellations — 49
avg. # per constellation — 3

Arabic (Moon Stations)
constellations — 28
avg. # per constellation — 2.5

Aztec
constellations — 5
avg. # per constellation — 0.5

Belarusian
constellations — 20
avg. # per constellation — 6

Boorong
constellations — 20
avg. # per constellation — 3

Chinese
constellations — 318
avg. # per constellation — 4.5

Dakota
constellations — 10
avg. # per constellation — 0.5

Egyptian
constellations — 28
avg. # per constellation — 9

Hawaiian (Starlines)
constellations — 13
avg. # per constellation — 7

Indian Vedic
constellations — 28
avg. # per constellation — 2.5

Inuit
constellations — 3
avg. # per constellation — 2.5

Japanese (Moon Stations)
constellations — 28
avg. # per constellation — 3

Kamilaroi
constellations — 13
avg. # per constellation — 1

Korean
constellations — 272
avg. # per constellation — 4.5

Macedonian
constellations — 19
avg. # per constellation — 4

Maori
constellations — 6
avg. # per constellation — 5.5

Mongolian
constellations — 4
avg. # per constellation — 6.5

Navajo
constellations — 8
avg. # per constellation — 16

Norse
constellations — 6
avg. # per constellation — 6

Ojibwe
constellations — 10
avg. # per constellation — 6.5

Constellations in the night sky as seen by Hawaiian (Starlines) culture

The data about the stars comes from the HYG star database. The constellation data comes from Stellarium, a free and open source planetarium + a lot of data cleaning, preparation & analysis to create this final piece.

No matter where you are on Earth, we all look up to the same sky during the dark nights. You might see a different section of it, nevertheless the stars have always fascinated humans. And even though the stars don't change, people have found many different shapes in the same sky. This interactive visual story looks into the differences & similarities between the constellations that 28 cultures, spread across time and across the World, have seen in the stars.

Credits Nadieh Bremer

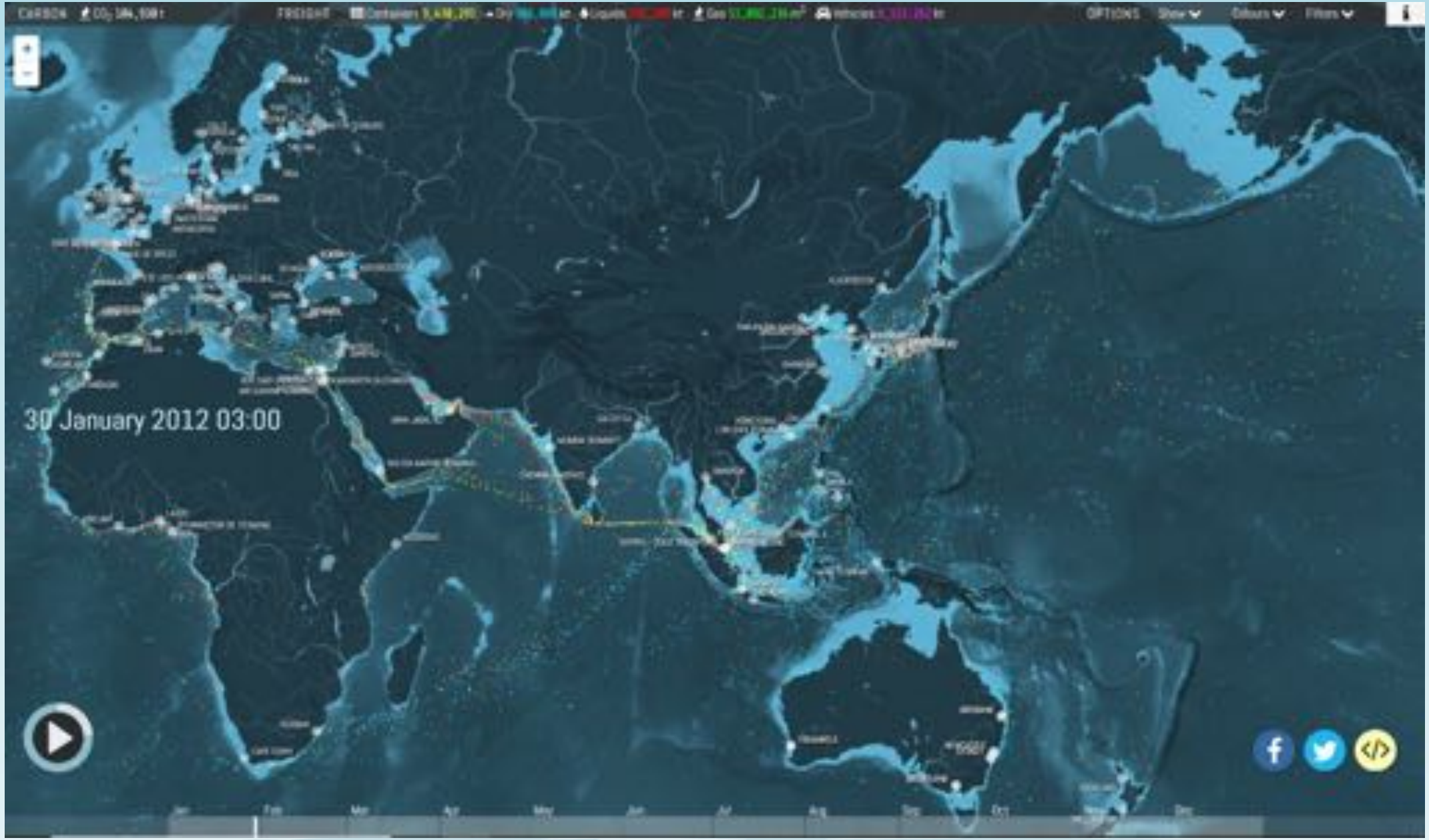
Vis #13

https://youtu.be/l9jemdstkxI

Top Vis

A GREAT SHIP MAP IN 2012

FAN, Jiahao



https://www.shipmap.org/

Reference

https://www.shiyanlou.com/

http://www.cbdio.com/BigData/2016-11/07/content_5371127.htm

Thank you!

Vis #14

https://youtu.be/z6gBBqscY0A

A Day in the Life of Americans

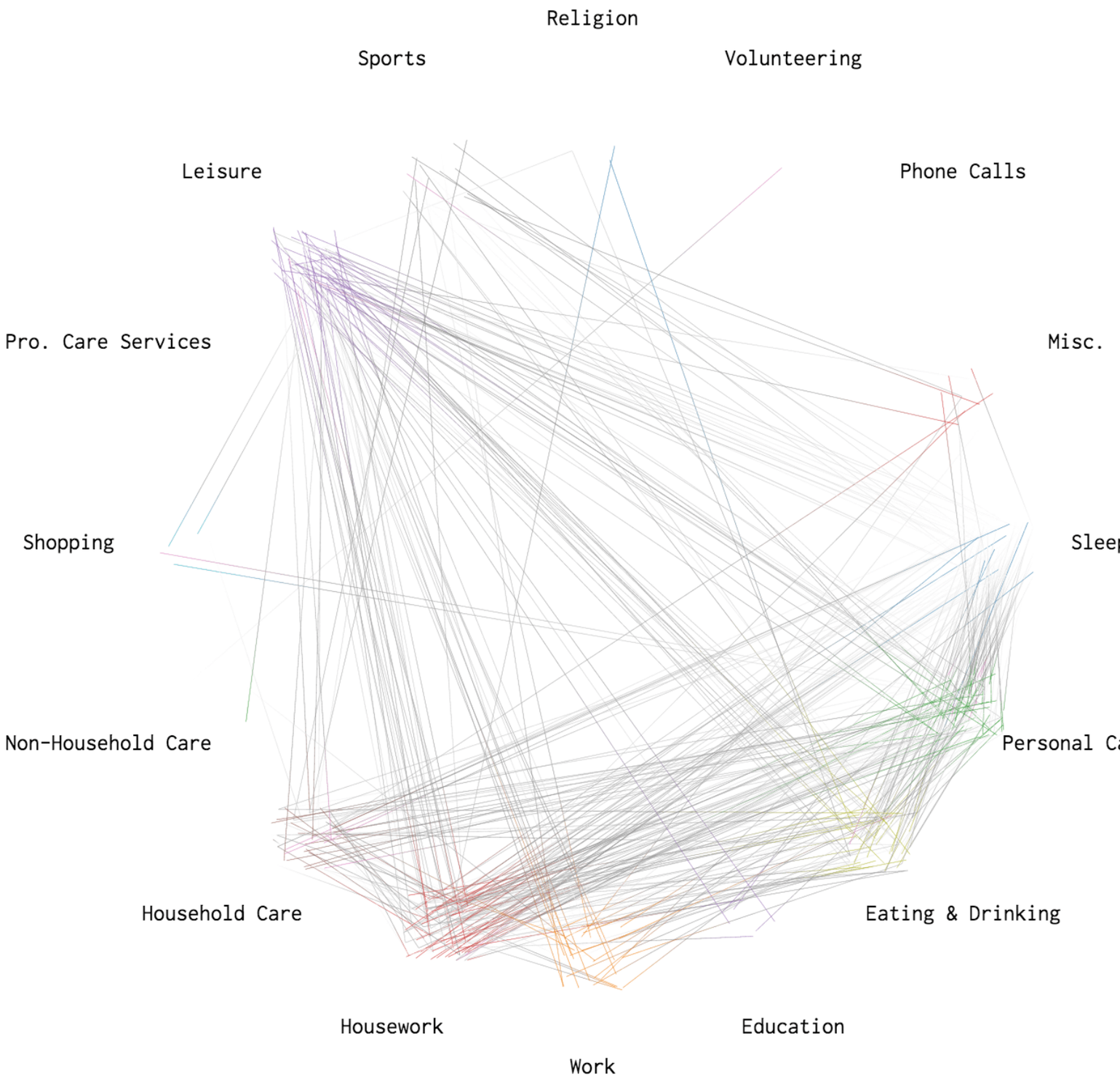
This is how America runs.

- Name ： GAN Yuanlin
- ID ： 20617067

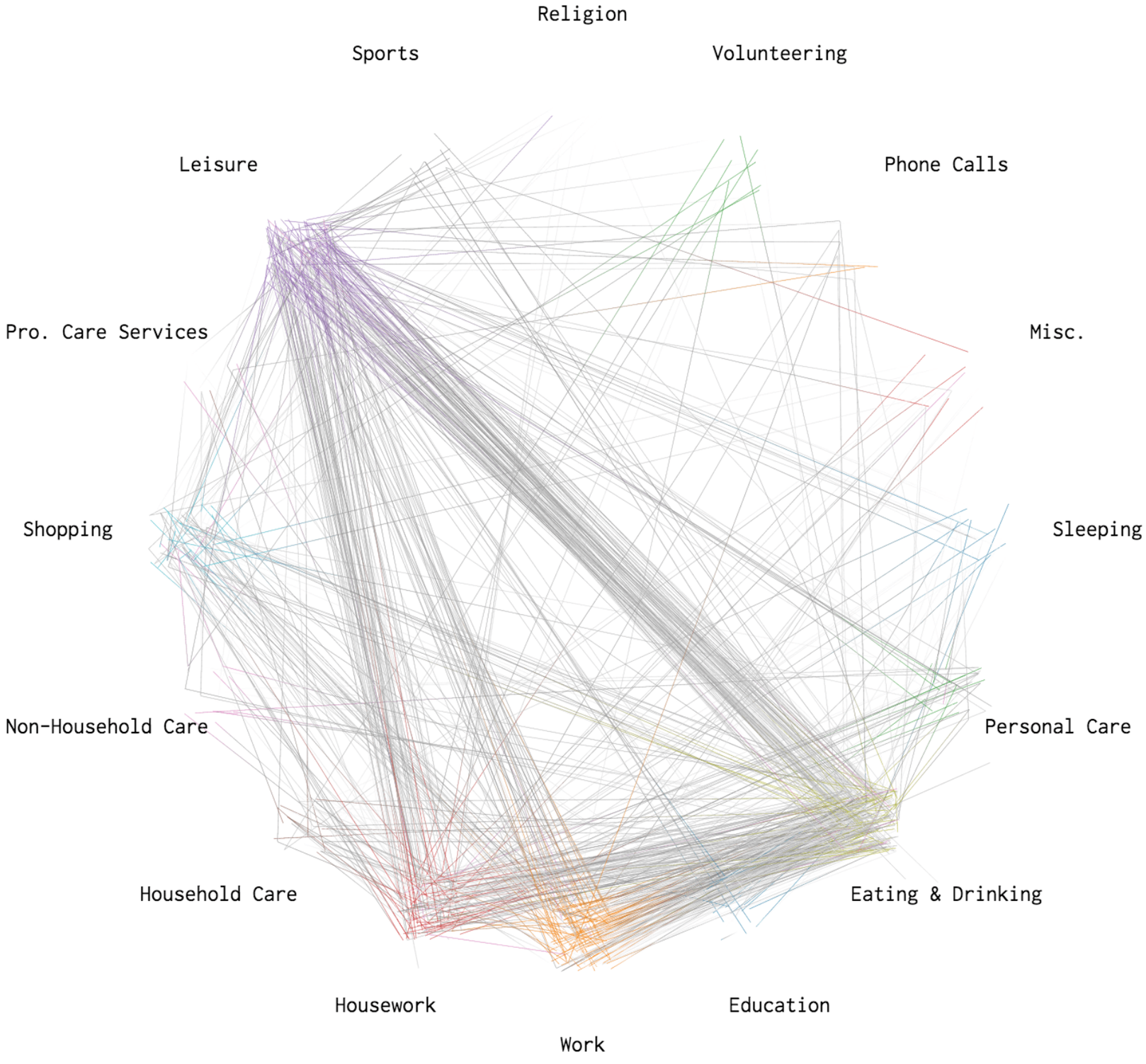
- Source ： https://flowingdata.com/2015/12/15/a-day-in-the-life-of-americans/

How do you spend your days?

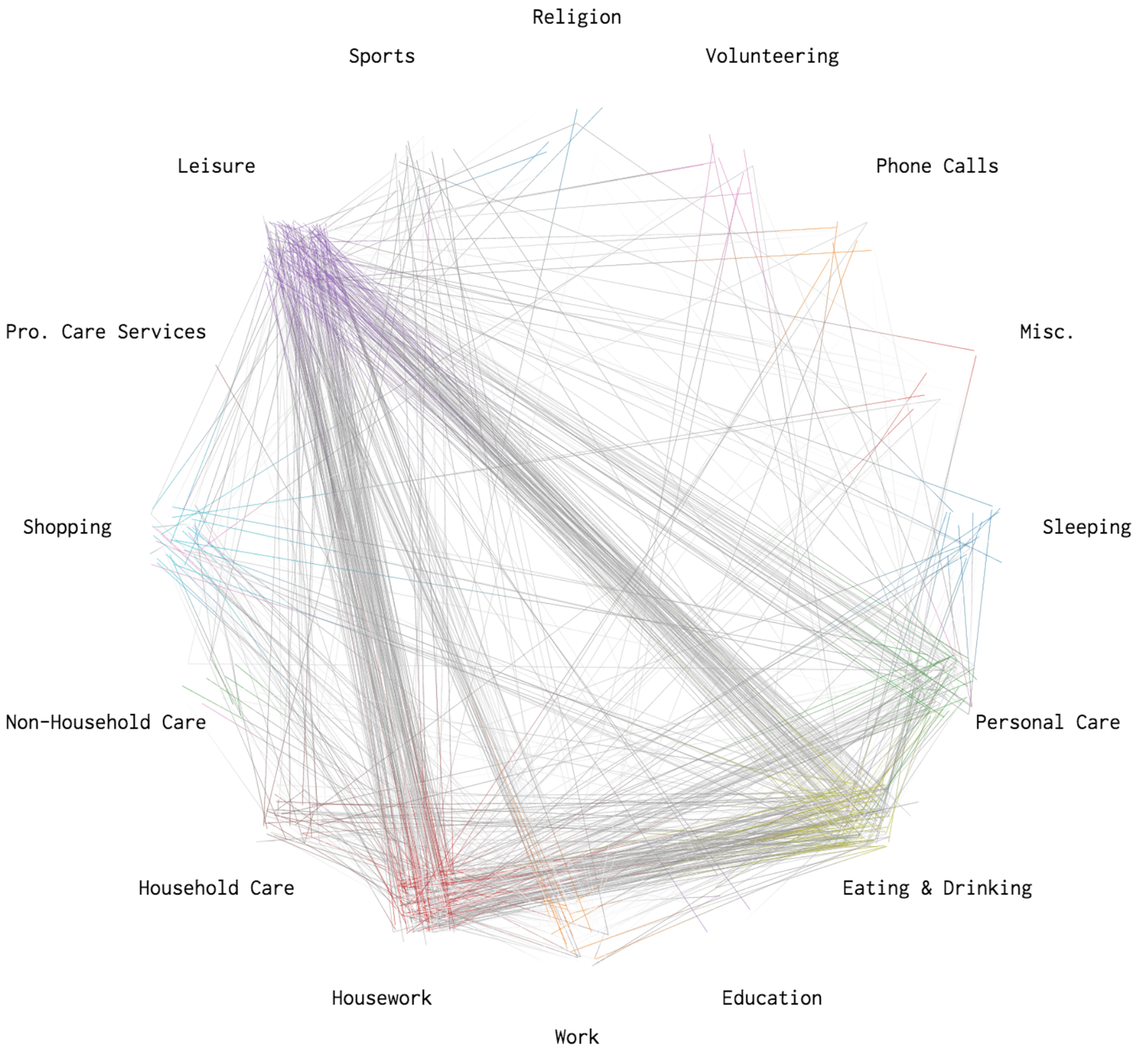
Waking Up


Religion
Sports
Volunteering
Leisure
Phone Calls
Pro. Care Services
Misc.
Shopping
Sleeping
Non-Household Care
Personal Care
Household Care
Eating & Drinking
Housework
Education
Work

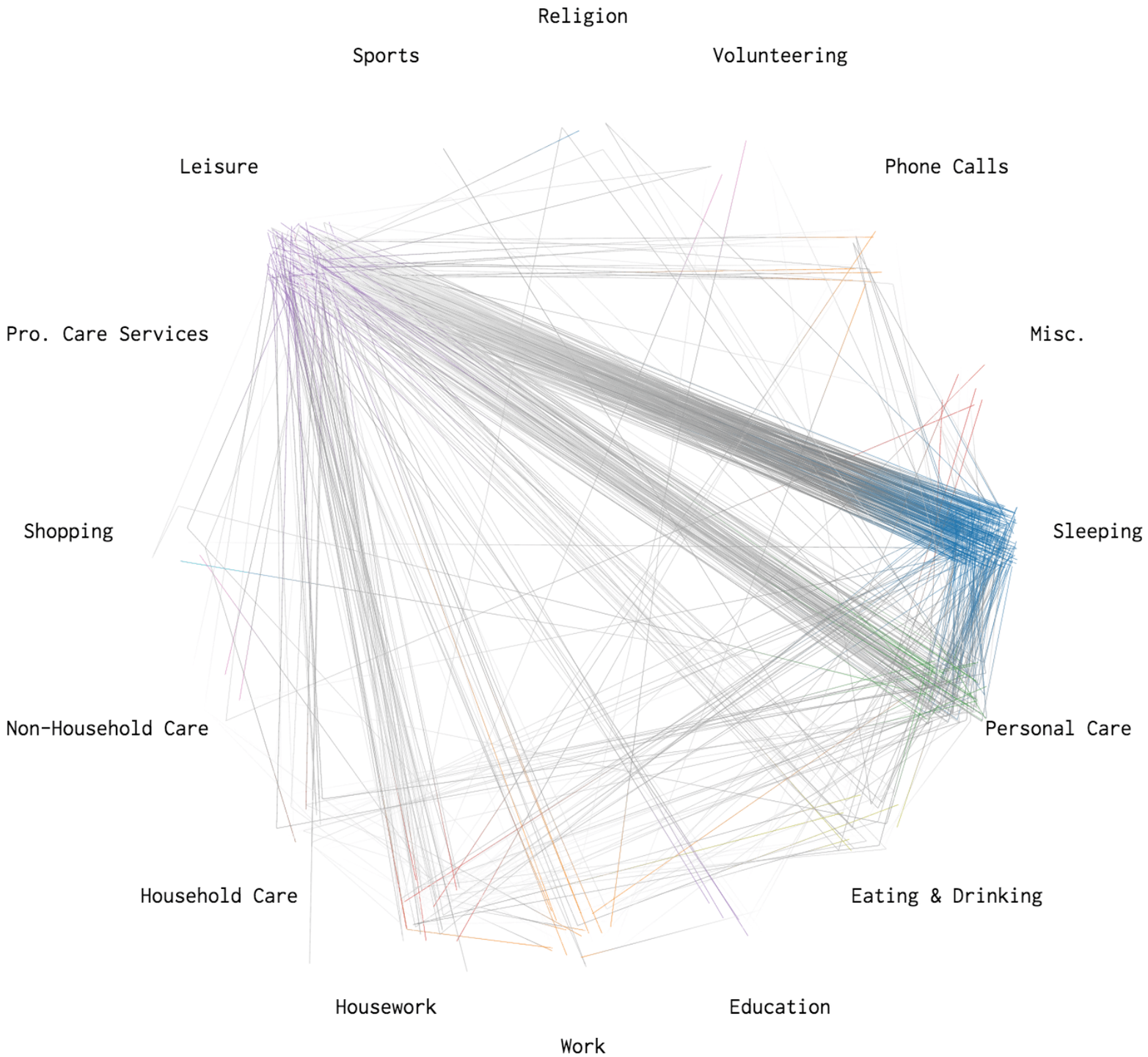
Lunch Hour


Religion
Sports
Volunteering
Leisure
Phone Calls
Pro. Care Services
Misc.
Shopping
Sleeping
Non-Household Care
Personal Care
Household Care
Eating & Drinking
Housework
Education
Work

Getting off Work



Winding Down

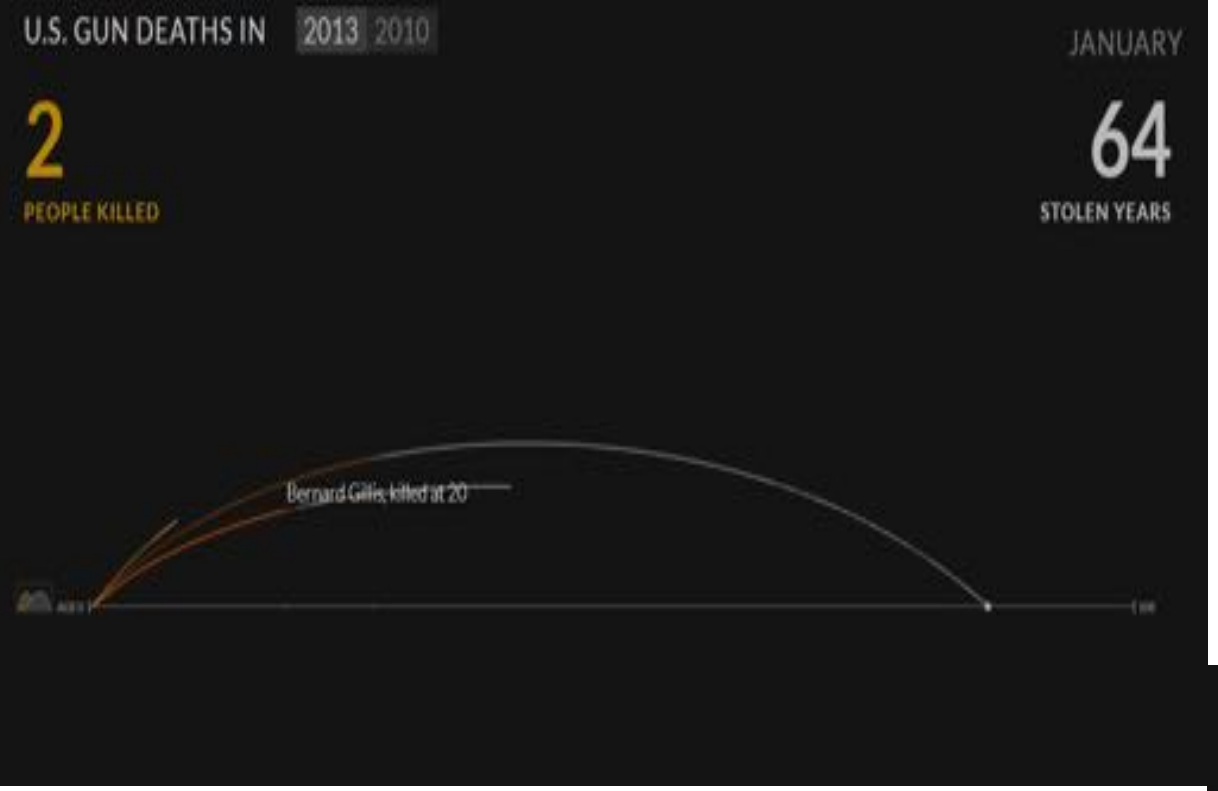


Vis #15

https://youtu.be/6b2GXCDmbD8

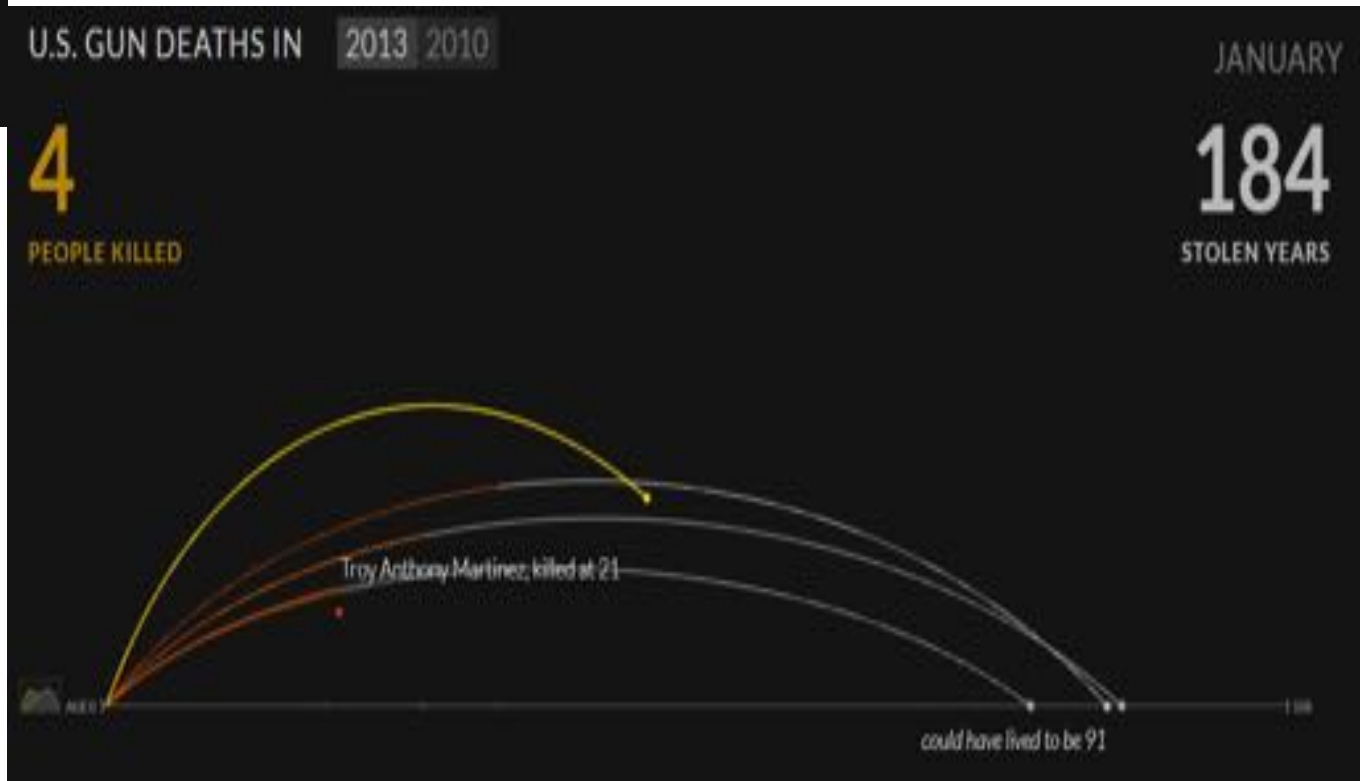
GAO YUANYUAN

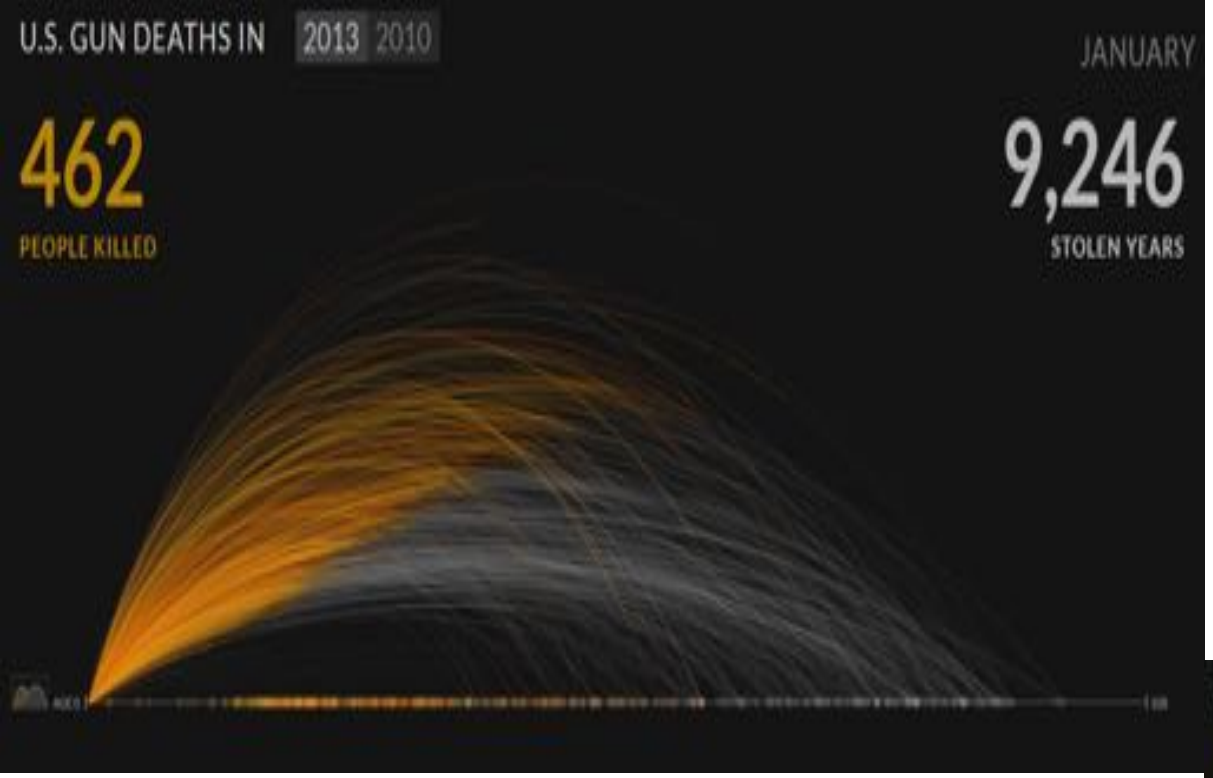
This is an animation, please see the Link:http ://guns.periscopic.com/?year=2013



- Each line stands for a person who died because of gun
- the gray lines mean how many years a person can live(prediction)
- before they died, the lines' color is orange

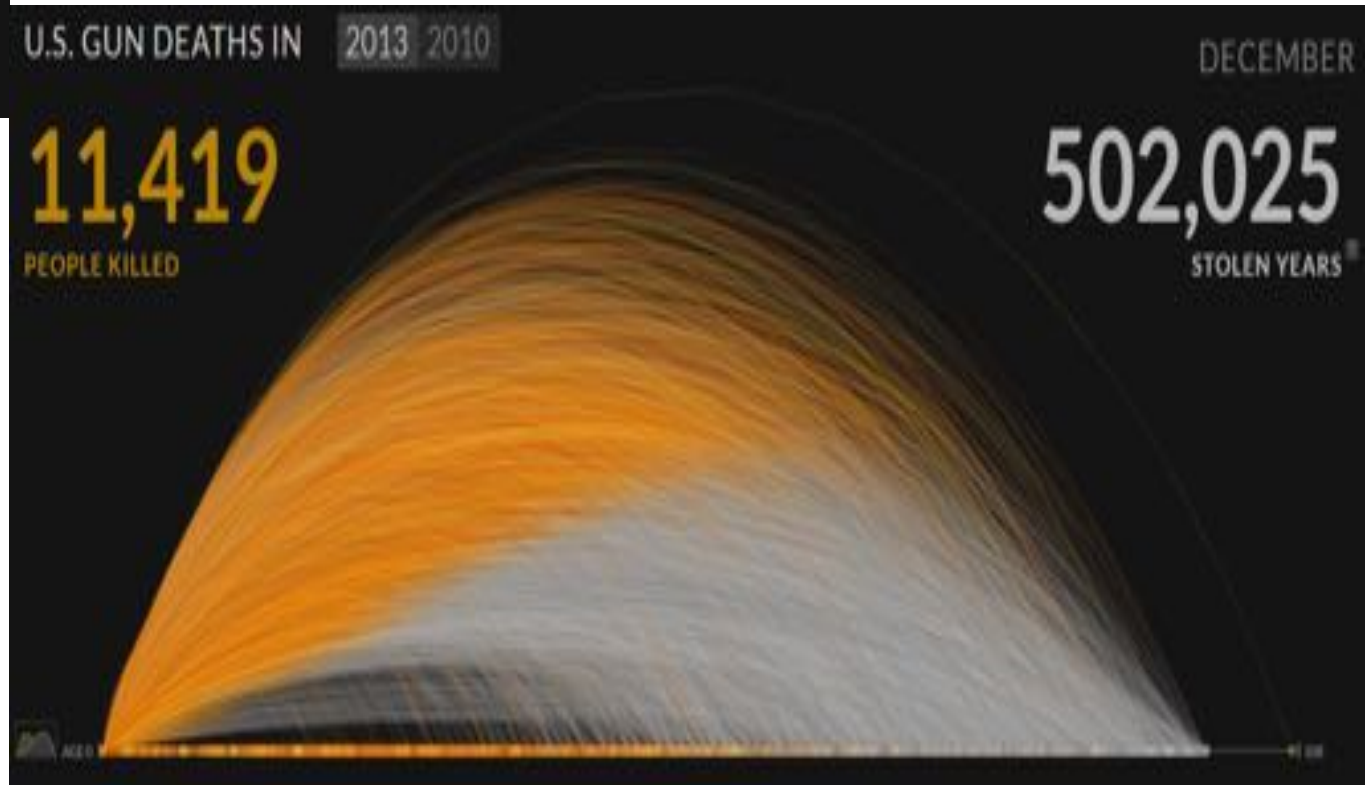
- In the beginning,lines appear one after another with an annotate at the dropping point.
- one dropping point means the death of a life





- many lines accelerate appear together
- Each additional line will make the number at the upper left corner increase one and also make the number at the upper right increase

- most of the dead are the young and middle-aged people



Why like this visaulization

- Firstly, this visualization uses each line stands for every single person, one dropping point means the death of a life. It is novel and evokes people's regret for the lost life, thus let people deeply reflect on gun management.

- Secondly, the rhythm of this dynamic visualization is awesome.

- Lastly, this animation design effectively conveys the message.

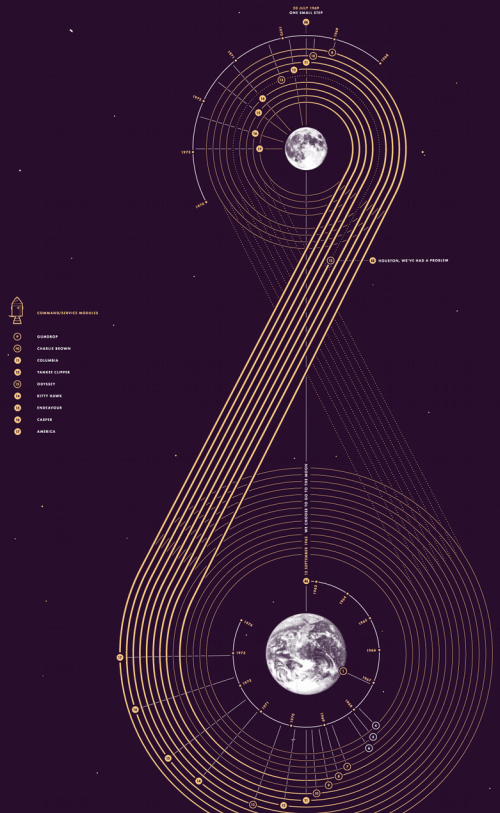
GAO YUANYUAN

Vis #16

https://youtu.be/dvjVaZcRTzI

Top Viz(Apollo Viz)

GARDAS,Nuthan

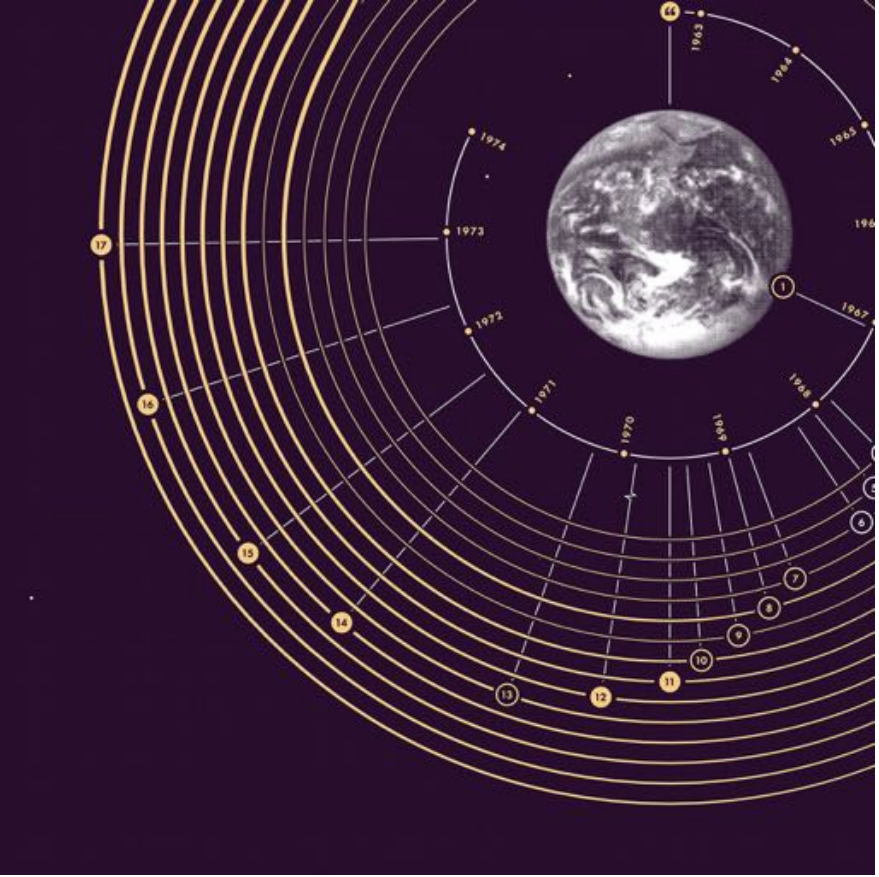


APOLLO

	CSM GROUND TEST	CSM FLIGHT TEST	LUNAR ORBIT	LM FLIGHT TEST	LANDING DRY RUN	LUNAR LANDING			EXTENDED LUNAR LANDING		
	1	7	8	9	10	11	12	13	14	15	17
MANNED MISSIONS	APOLLO 1	APOLLO 7	APOLLO 8	APOLLO 9	APOLLO 10	APOLLO 11	APOLLO 12	APOLLO 13	APOLLO 14	APOLLO 15	APOLLO 17
LAUNCH DATE	27 JANUARY 1967	11 OCTOBER 1968	21 DECEMBER 1968	3 MARCH 1969	18 MAY 1969	16 JULY 1969	14 NOVEMBER 1969	11 APRIL 1970	31 JANUARY 1971	26 JULY 1971	7 DECEMBER 1972
COMMANDER	GRISSOM	SCHIRRA	BORMAN	MCDIVITT	STAFFORD	ARMSTRONG	CONRAD	LOVELL	SHEPARD	SCOTT	CERNAN
COMMAND MODULE PILOT	WHITE	EISELE	LOVELL	SCOTT	YOUNG	COLLINS	GORDON	SWIGERT	ROOSA	WORDEN	EVANS
LUNAR MODULE PILOT	CHAFFEE	CUNNINGHAM	ANDERS	SCHWEICKART	CERNAN	ALDRIN	BEAN	HAISE	MITCHELL	IRWIN	SCHMITT

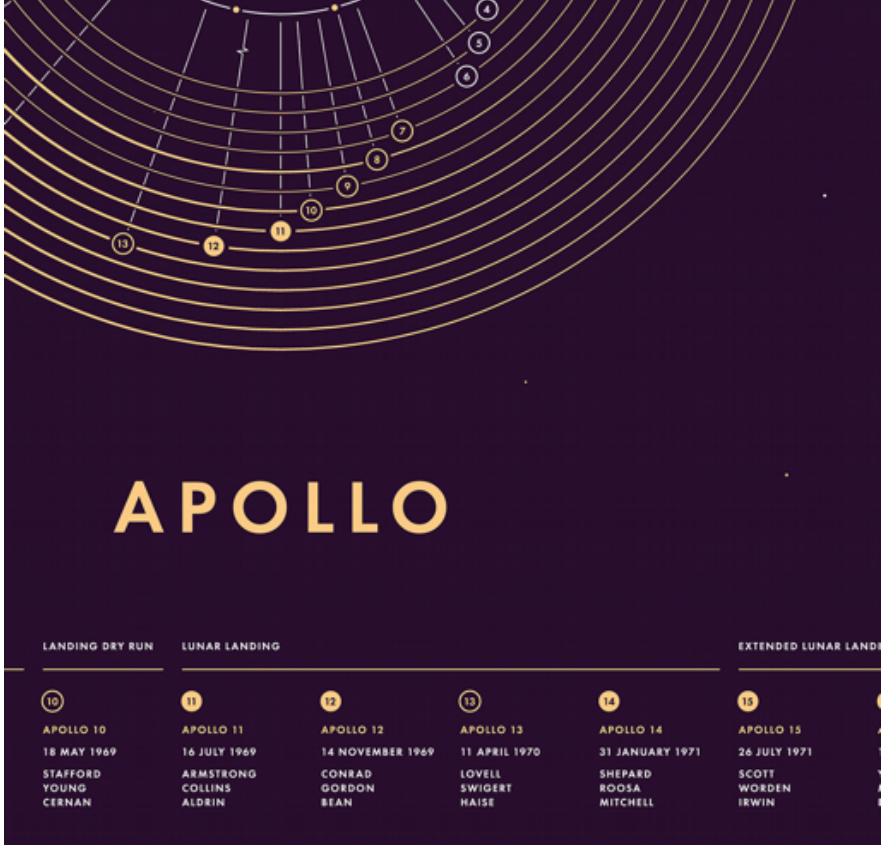
/100

MADE FROM DATA

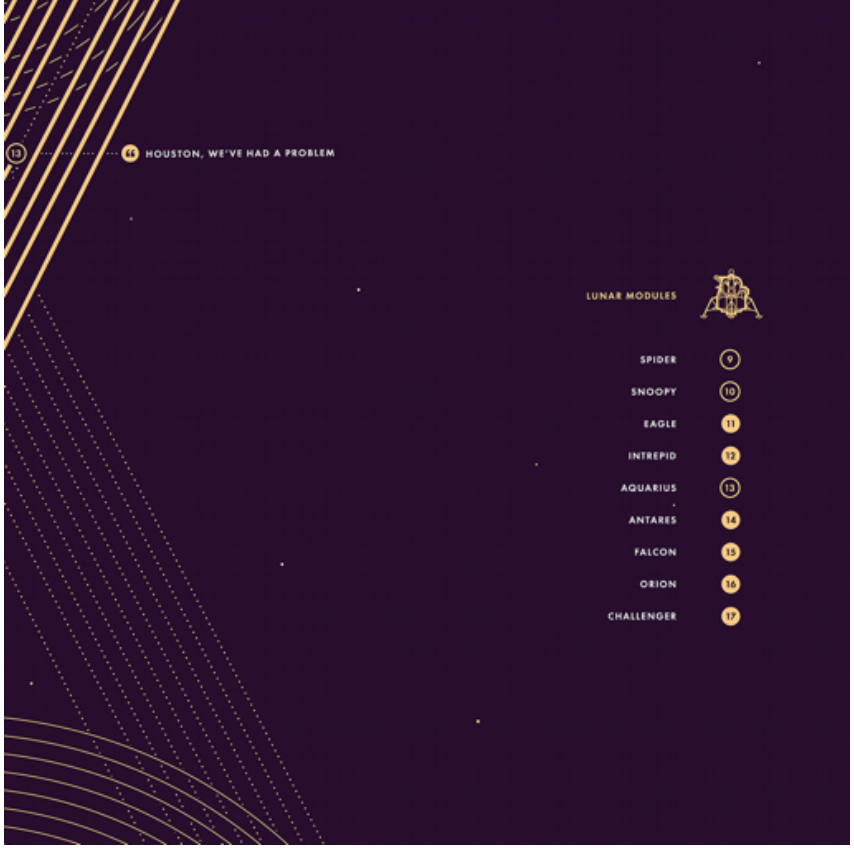


Trajectories of 13 Missions(Earth)

Trajectories of 8* Missions(Moon)



List of Apollo Missions



List of Lunar Modules on the right

Vis #17

https://youtu.be/6ZQnK1sVcnw

National Geographics: A History of Skis

Presented by: GU, Yimeng

A History of Skis

After the last ice age, Stone Age hunters began strapping long pieces of wood to their feet to travel farther and faster over snow in pursuit of the game that flourished across Europe and Asia. Adaptations for terrain and snow conditions influenced the design of the skis in different regions. Scientists continue to find evidence of these early skiers engraved in rock and preserved in bogs.

global map of ski origins

skis varying over time

Reference

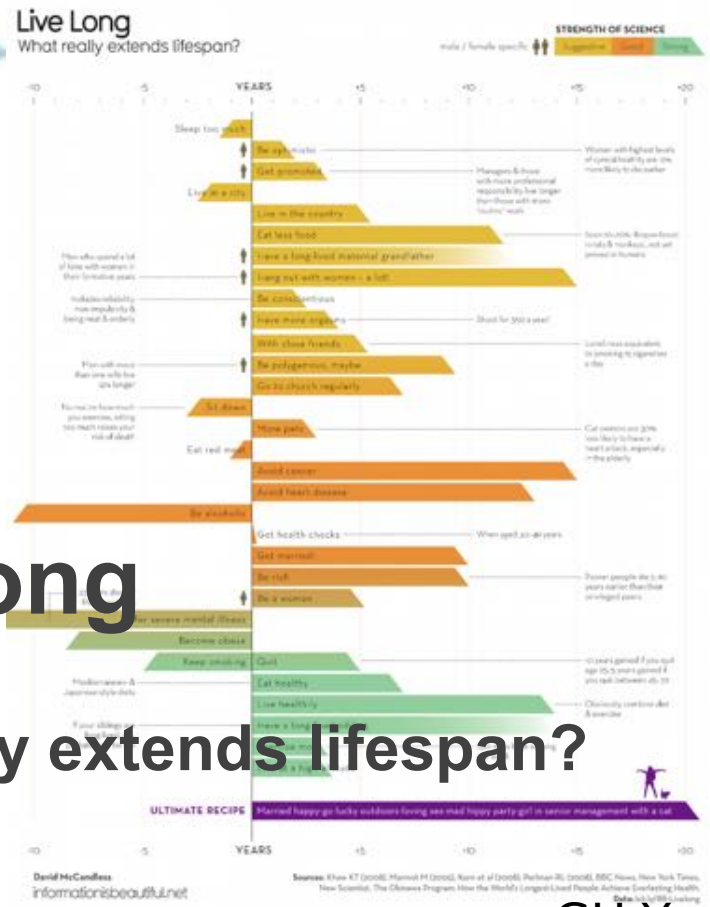
- https://www.theguardian.com/artanddesign/gallery/2017/mar/01/national-geographic-infographics-taschen

Vis #18

https://youtu.be/Ldk0LxDqV18

Live Long

What really extends lifespan?



GU Yu
20640105

Outlook

1

Introduction

Brief introduction of chosen data visualization

2

Main Encoding scheme

Attributes and encoding scheme

3

Other design

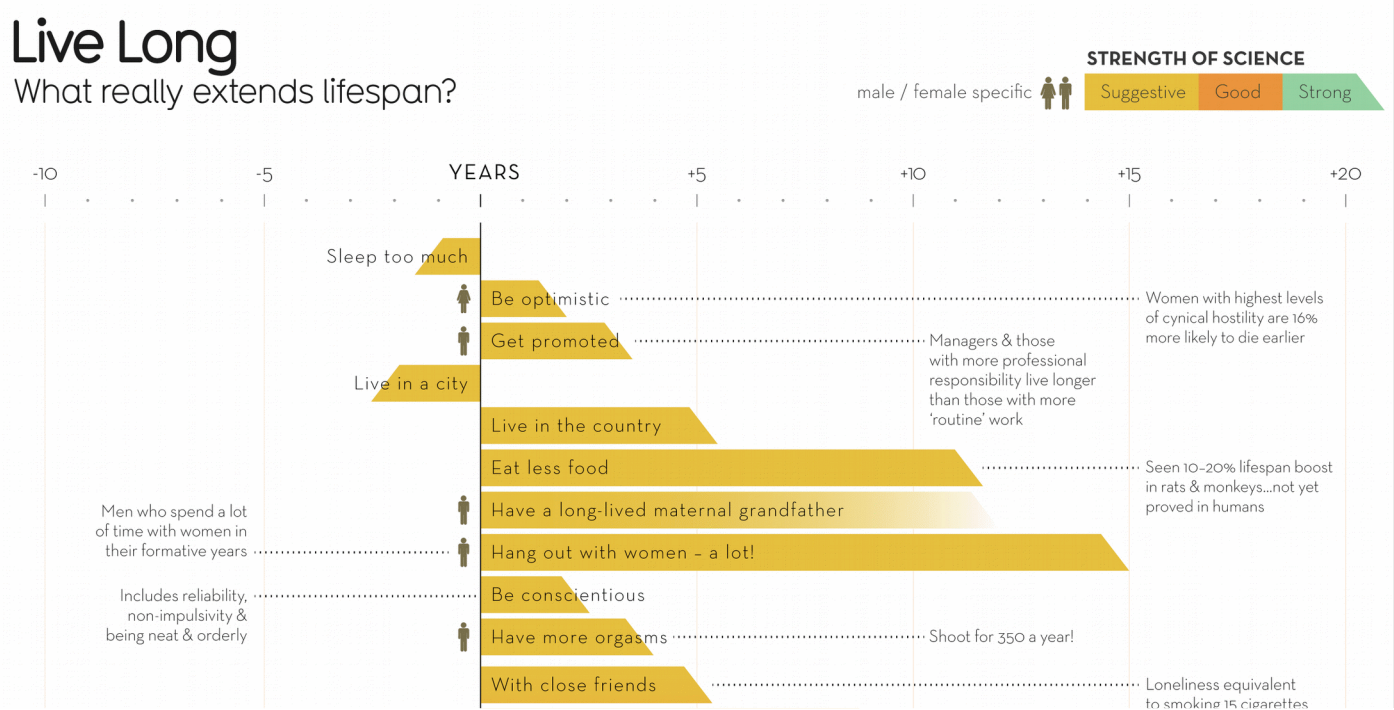
Other data visualization design

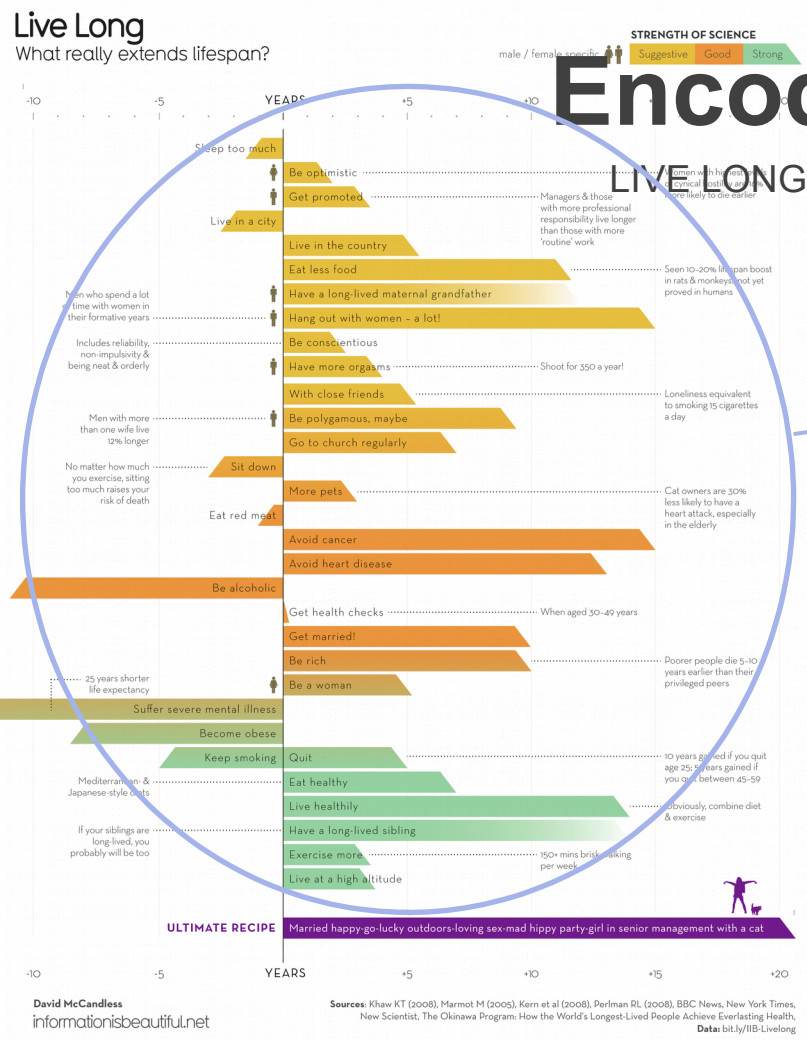
Introduction of data

LIVE LONG-What really extends lifespan?

Data descript

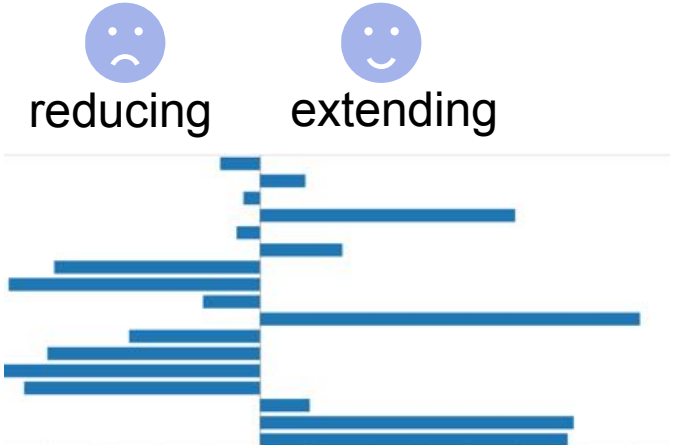
Dataset are scie
researches on h
lifespan extends
shorten with va
factors.





Encoding scheme

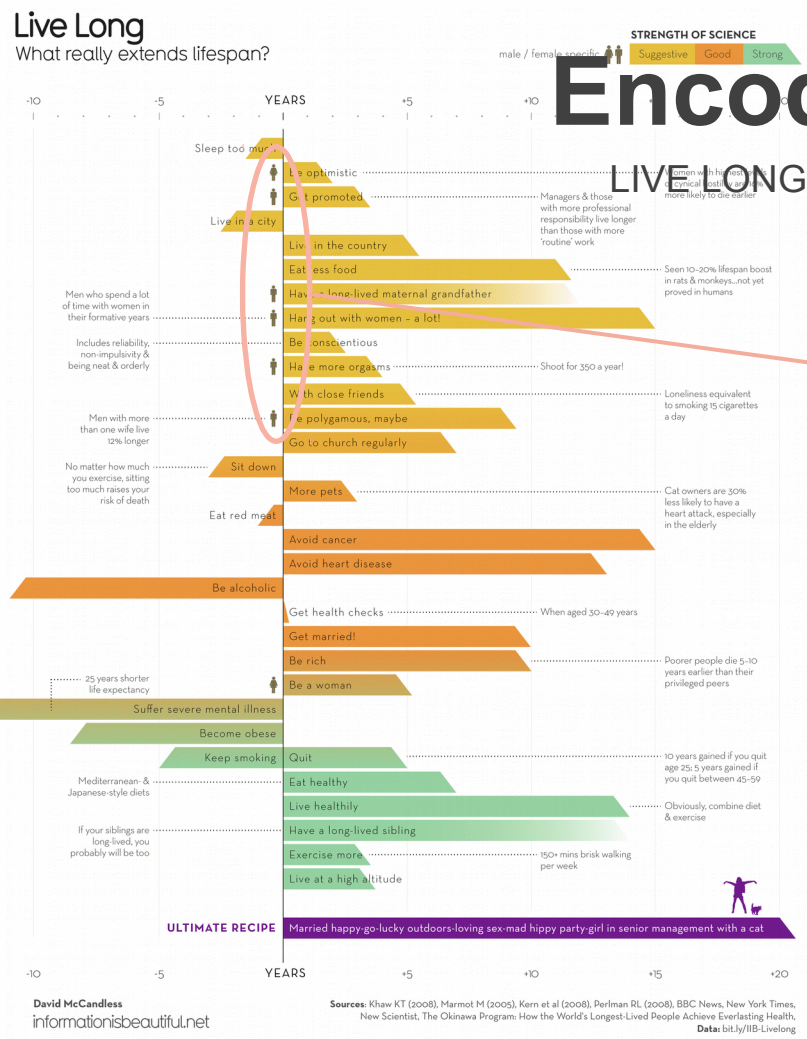
LIVE LONG-What really extends lifespan?



01

Extend or shorten ?

Encoding with **negative positive horizontal bar chart** → shows the distribution of year lifespan extends or shorten



Encoding scheme

LIVE LONG-What really extends lifespan?

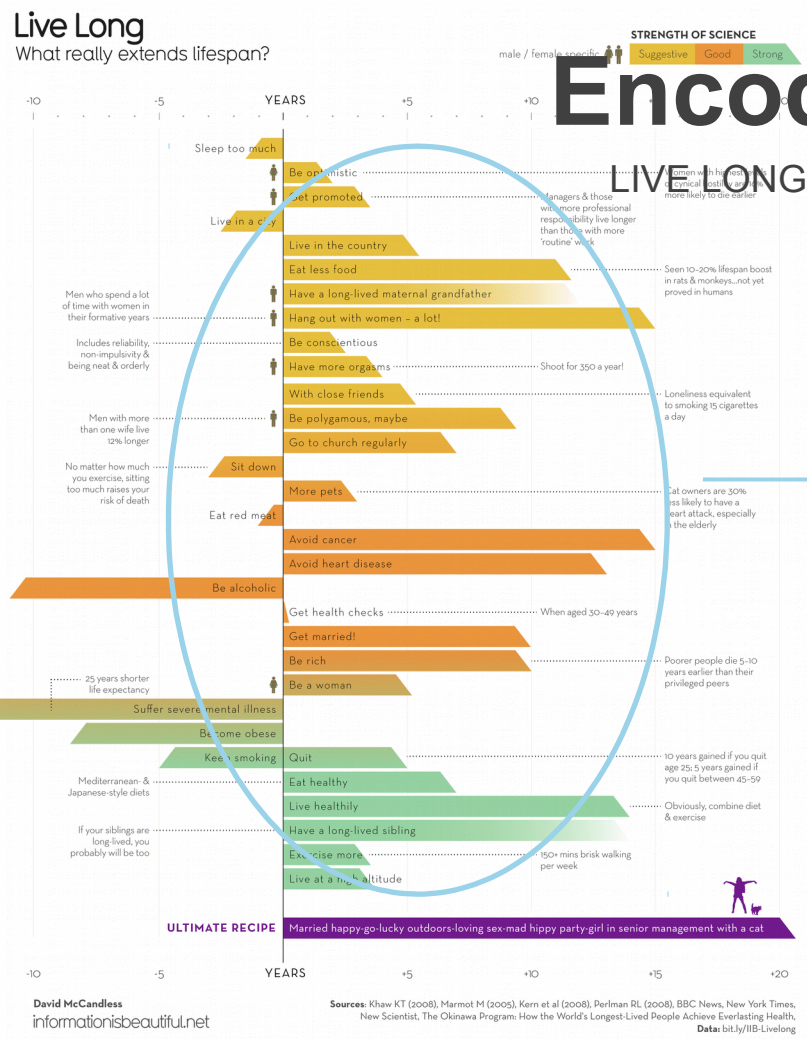
male female

02

Male or female

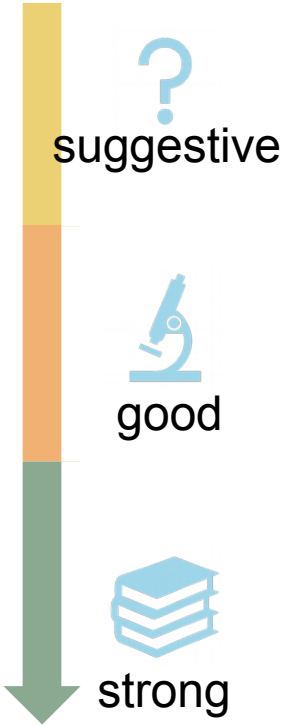
Encoding with male and female **icons** to identify the preference in gender in some factors.

shows the gender identity in longevity



Encoding scheme

LIVE LONG-What really extends lifespan?



03

Strength of science

Encoding the degree of strength of science with **gradient of color**

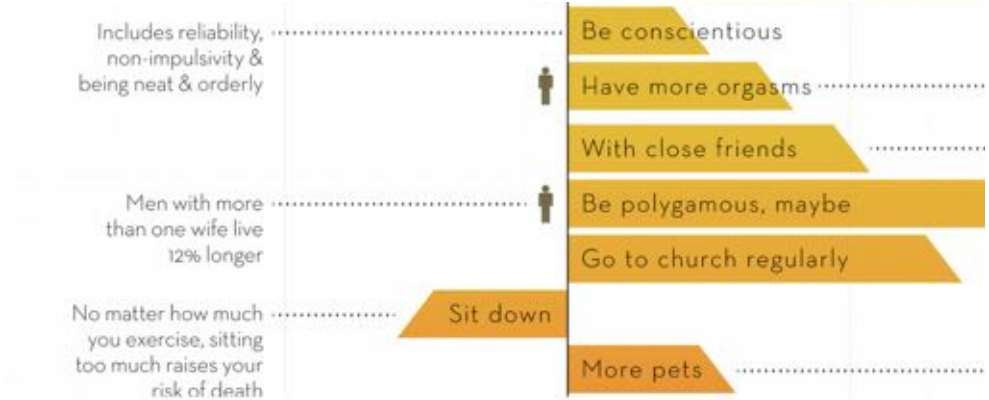
Indicate the variance of factors' scientific convincing degree.

Other design

LIVE LONG-What really extends lifespan?

1.It also shows an “ultimate recipe” for summarizing the beneficial factors shows above

2.It adds some notation for understanding



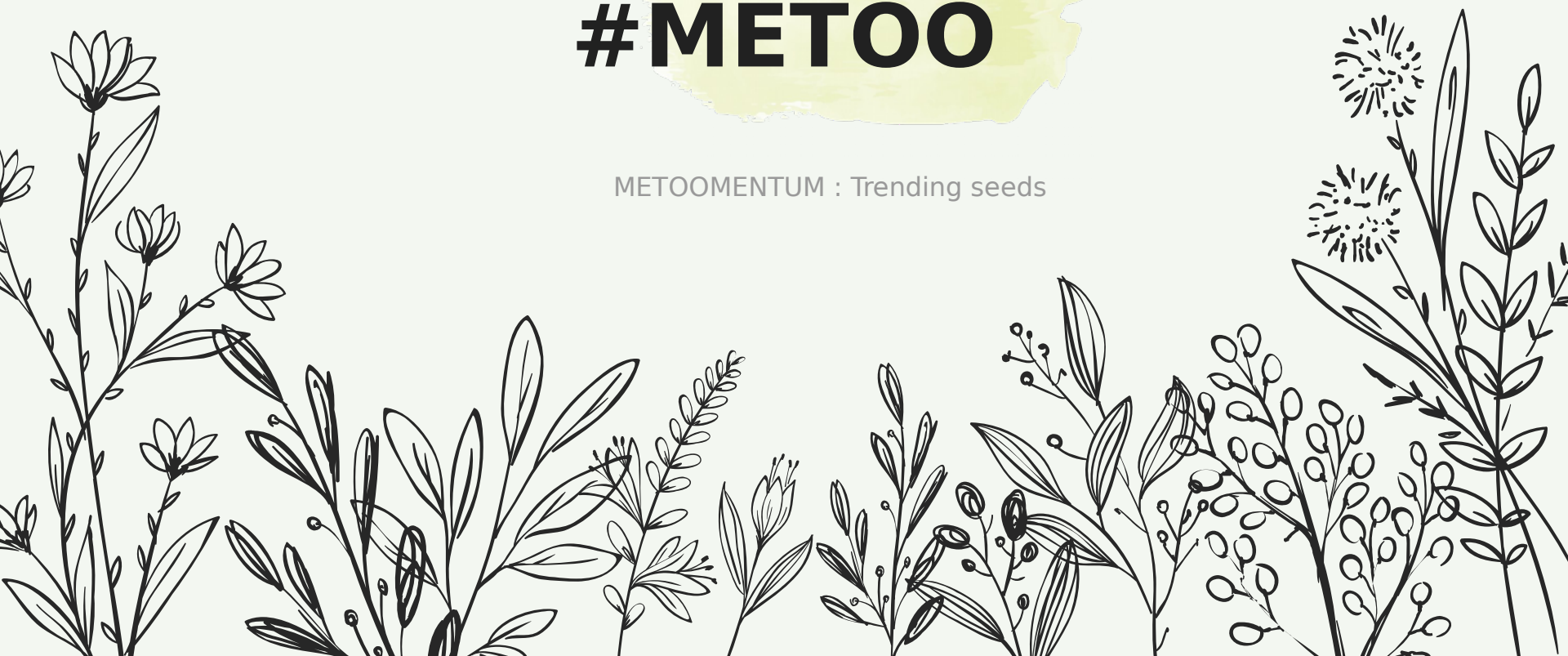
Thank you

Vis #19

https://youtu.be/nImhn6HhlOo

#METOO

METOOMENTUM : Trending seeds



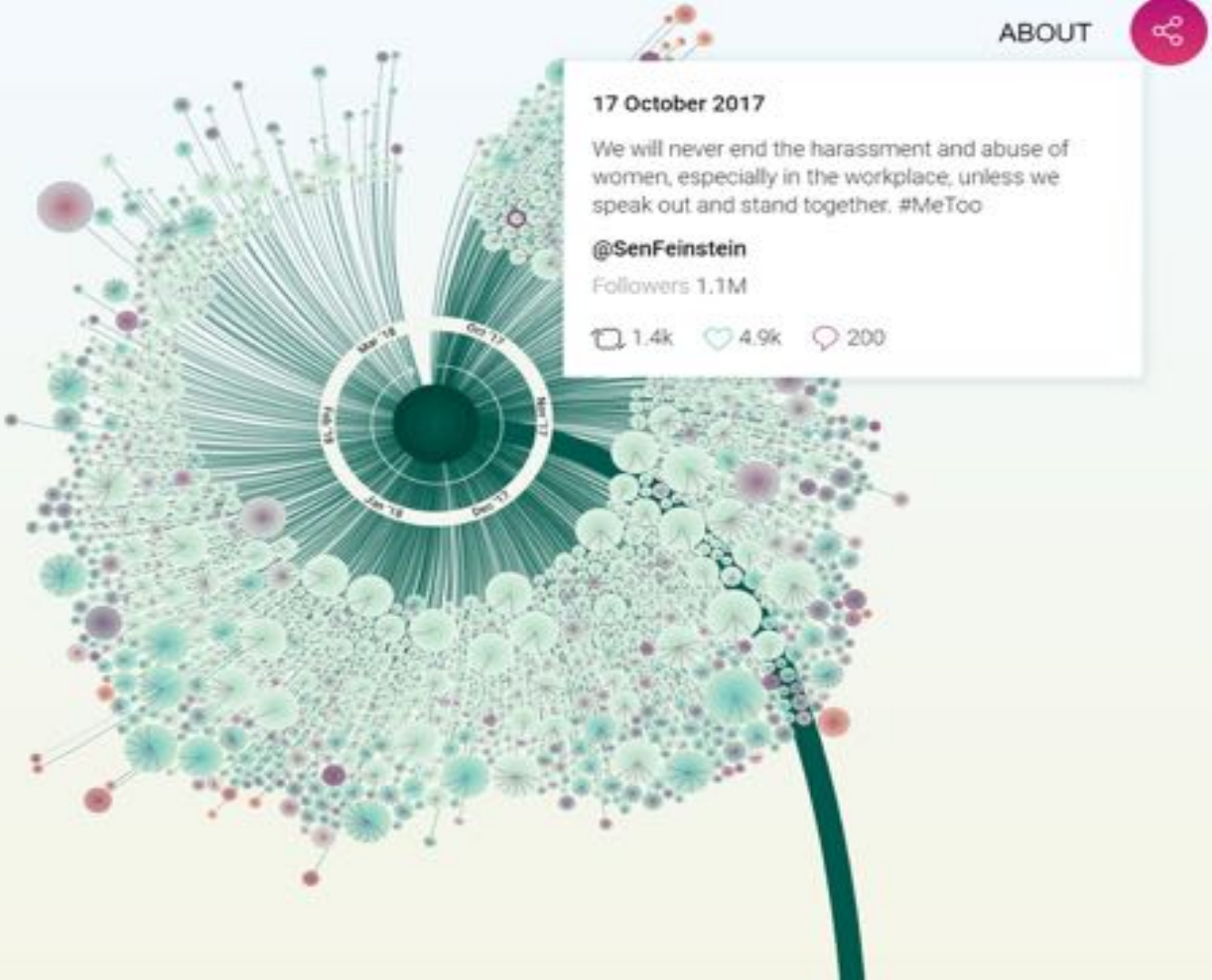
ABOUT

Encoding scheme

Colour: No. of likes Pattern: No. of comments

Log. distance: No. of retweets Size: No. of followers

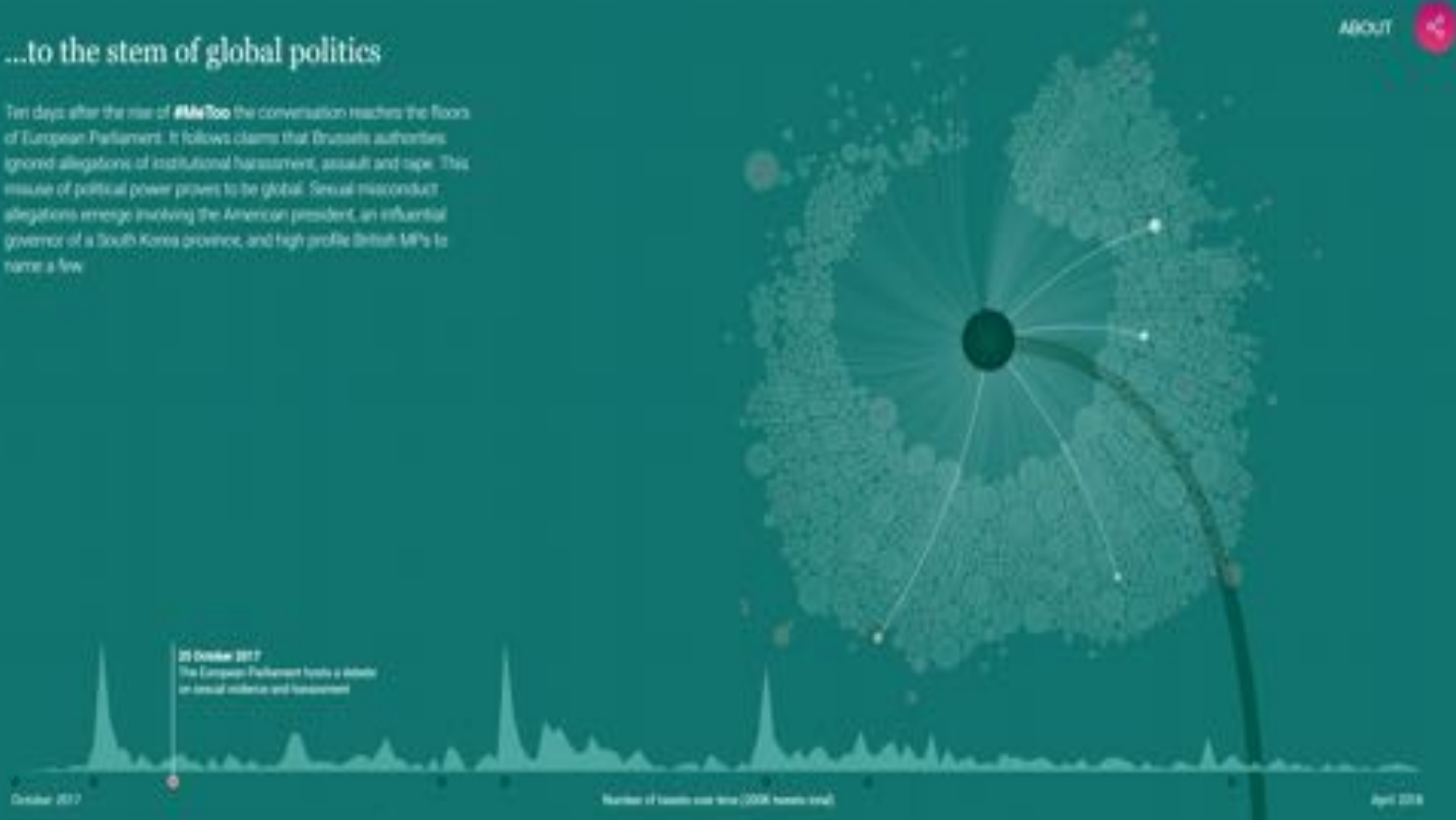
ABOUT


17 October 2017
We will never end the harassment and abuse of women, especially in the workplace, unless we speak out and stand together. #MeToo
@SenFeinstein
Followers 1.1M
1.4k
4.9k
200
Mar '18
Oct '17
Nov '17
Dec '17
Jan '18
Feb '18

...to the stem of global politics

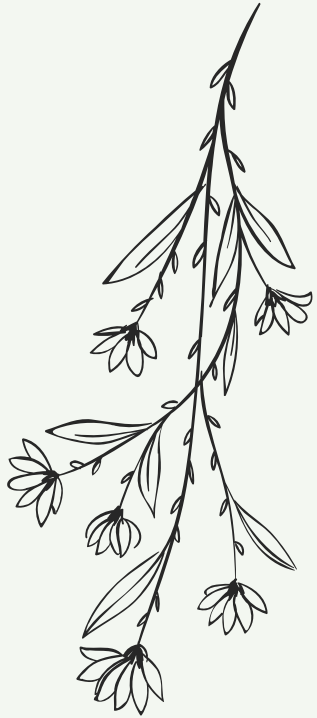
Ten days after the rise of **#MeToo** the conversation reaches the floors of European Parliament. It follows claims that Brussels authorities ignored allegations of institutional harassment, assault and rape. This misuse of political power proves to be global. Sexual misconduct allegations emerge involving the American president, an influential governor of a South Korea province, and high profile British MPs to name a few.

ABOUT



Resources

http://www.metoomentum.com/trending.html



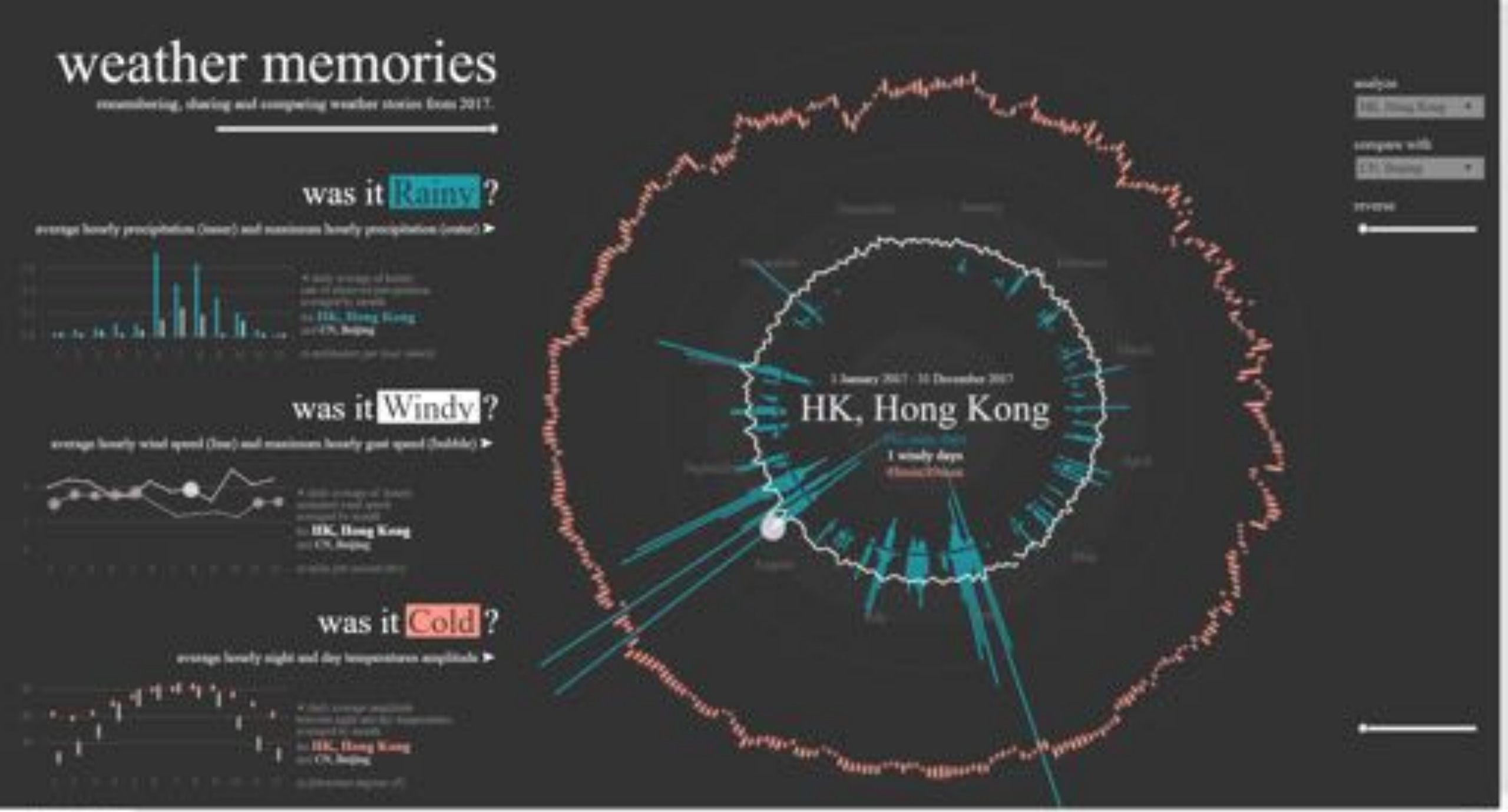
Vis #20

https://youtu.be/xoNTzddzJdc

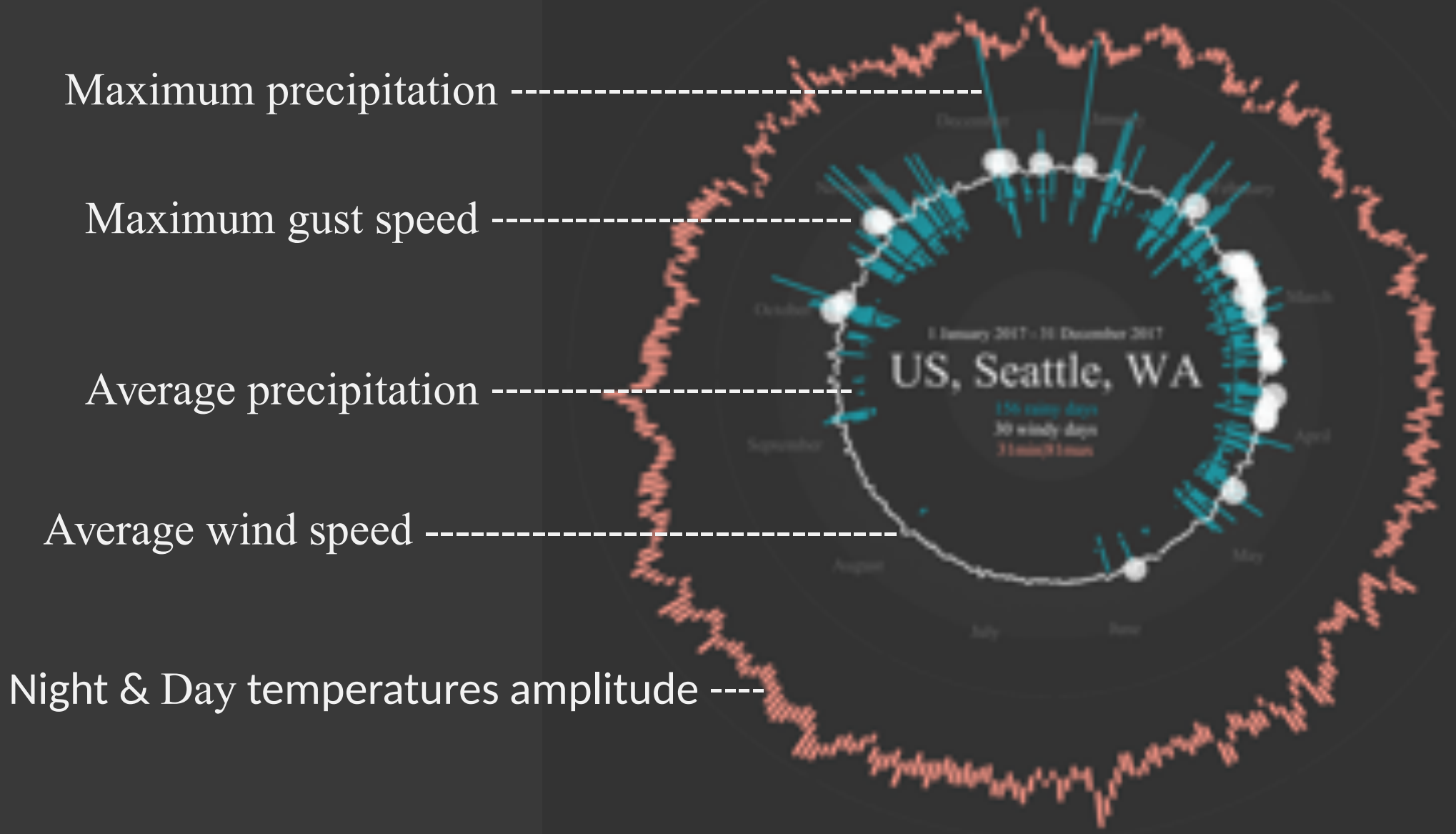
Weather Memories from 2017

Data Visualization

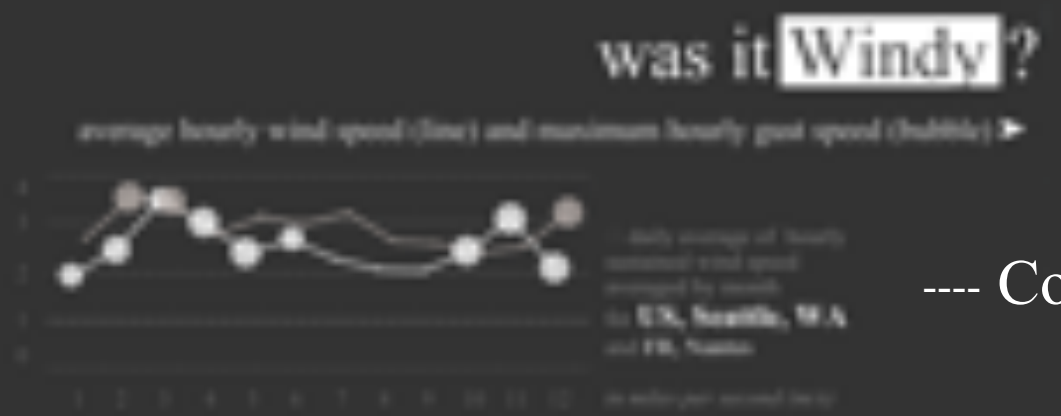
HUANG Mei
20658164



URL: https://public.tableau.com/profile/ludovic.tavernier#!/vizhome/weathermemories/weathermemories


Maximum precipitation
Maximum gust speed
Average precipitation
Average wind speed
Night & Day temperatures amplitude
US, Seattle, WA

---- Compared hourly precipitation data with another city



---- Compared hourly wind speed data with another city

---- Compared temperatures amplitude with another city

THANKS

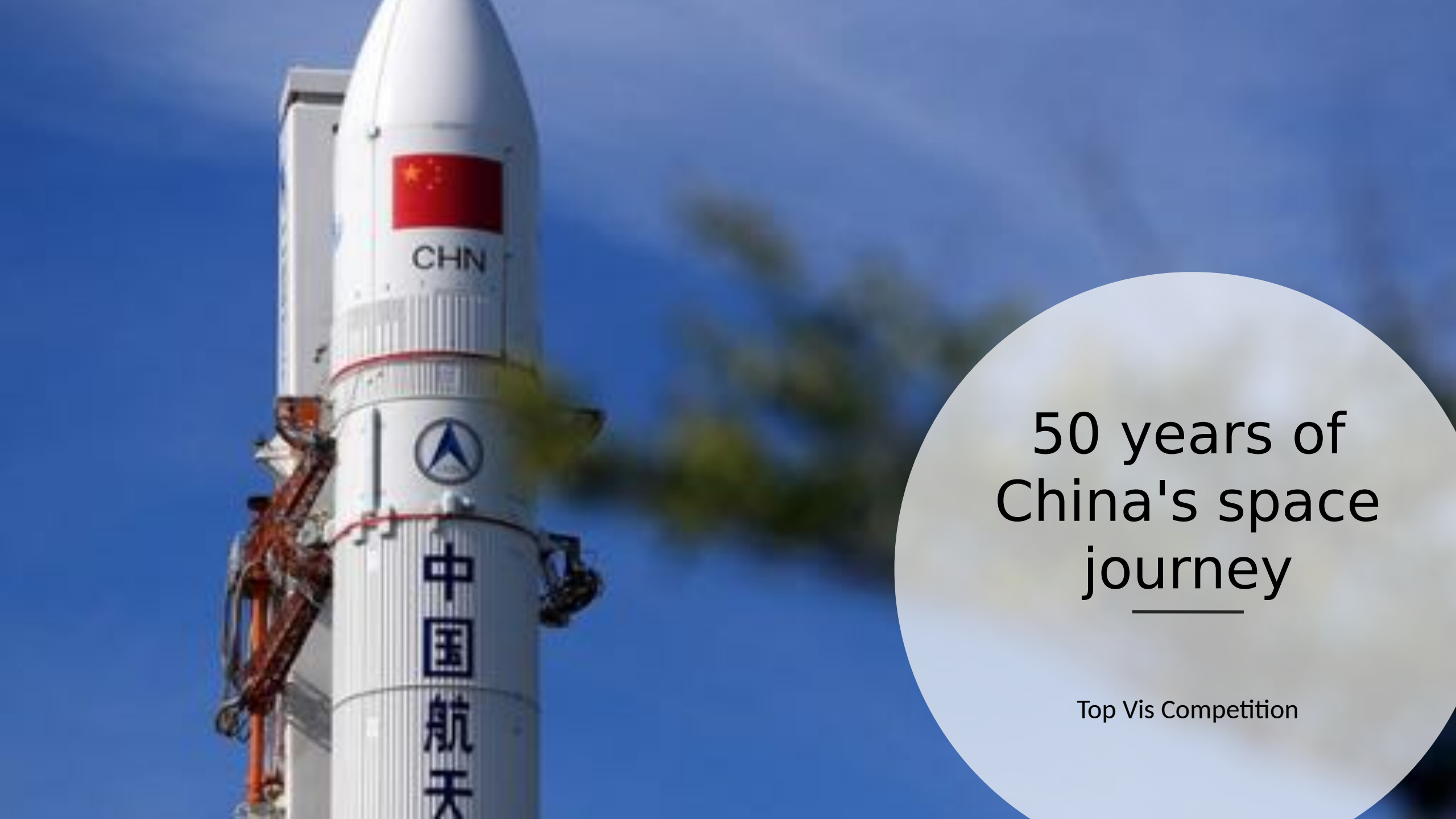
For watching

HUANG Mei
20658164

Vis #21

https://youtu.be/Y6lF4XM0SnE

Huang Sikai



50 years of China's space journey

Top Vis Competition

50 years of China's space journey

BOLDLY GO BEYOND THE CELESTIAL

Since the first satellite launched on April 24th, 1970, China has come a long way in her frequency of rocket launches and the spacecrafts' orbital distances. Effective payloads of the rockets have grown from the size of satellites to manned spaceships and lunar probes.

As we speak, China's robotic lunar rover Yutu-2 (Jade Rabbit) is transmitting images and data from the far side of the moon, in preparation for Chinese taikonauts' mission to the moon in 2030.

Total no. of launch

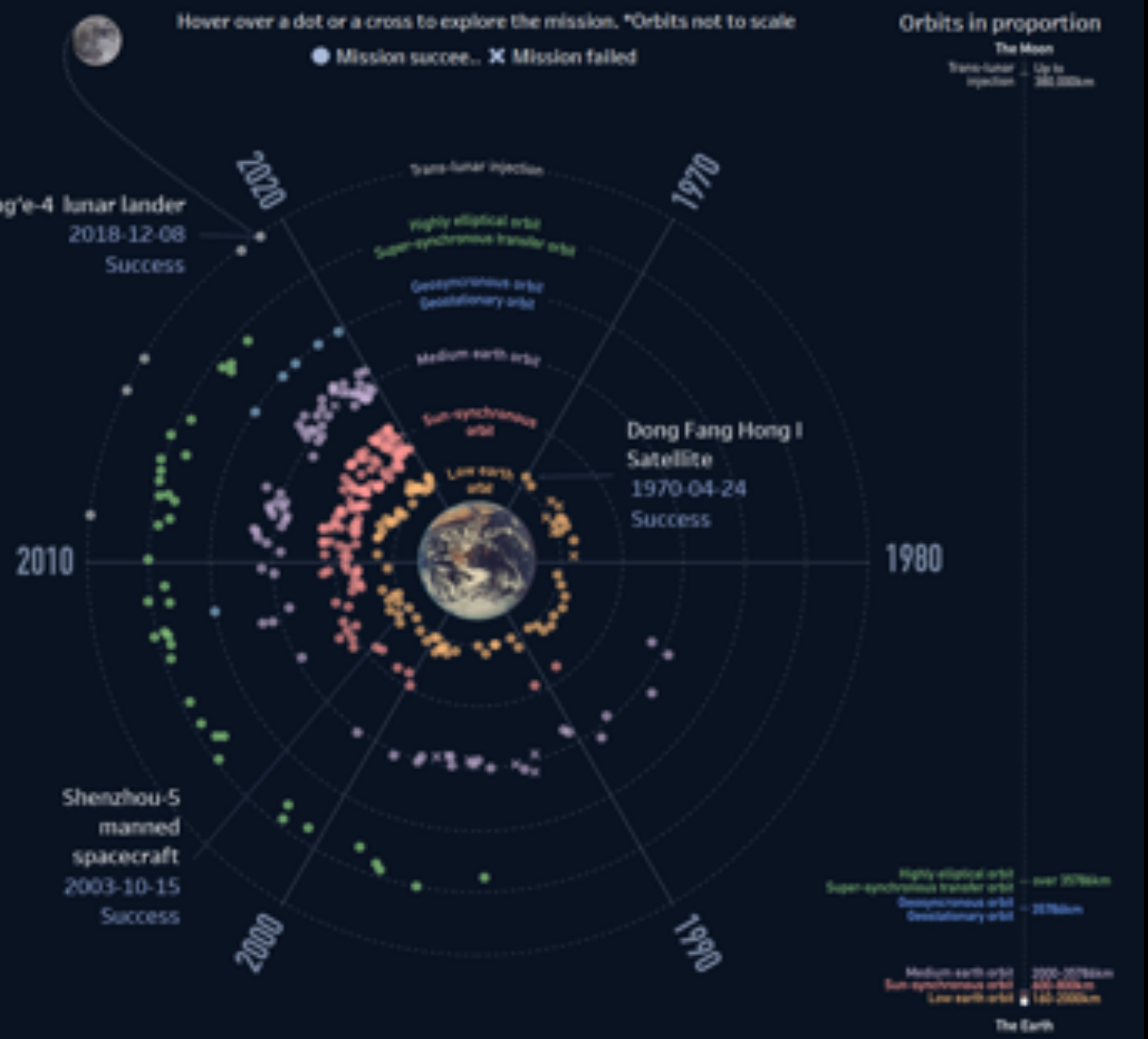
328

Success rate

92.4%

Launch data last updated on 26 July 2019.
Source: www.spaceflightfans.cn/china-space-launch-record
Photo: www.unsplash.com

Wendy Shijia | @ShijiaWendy | 10 Aug 2019



50 years of China's space journey

BOLDLY GO BEYOND THE CELESTIAL

Since the first satellite launched on April 24th, 1970, China has come a long way in her frequency of rocket launches and the spacecrafts' orbital distances. Effective payloads of the rockets have grown from the size of satellites to manned spaceships and lunar probes.

As we speak, China's robotic lunar rover Yutu-2 (Jade Rabbit) is transmitting images and data from the far side of the moon, in preparation for Chinese taikonauts' mission to the moon in 2030.

Total no. of launch

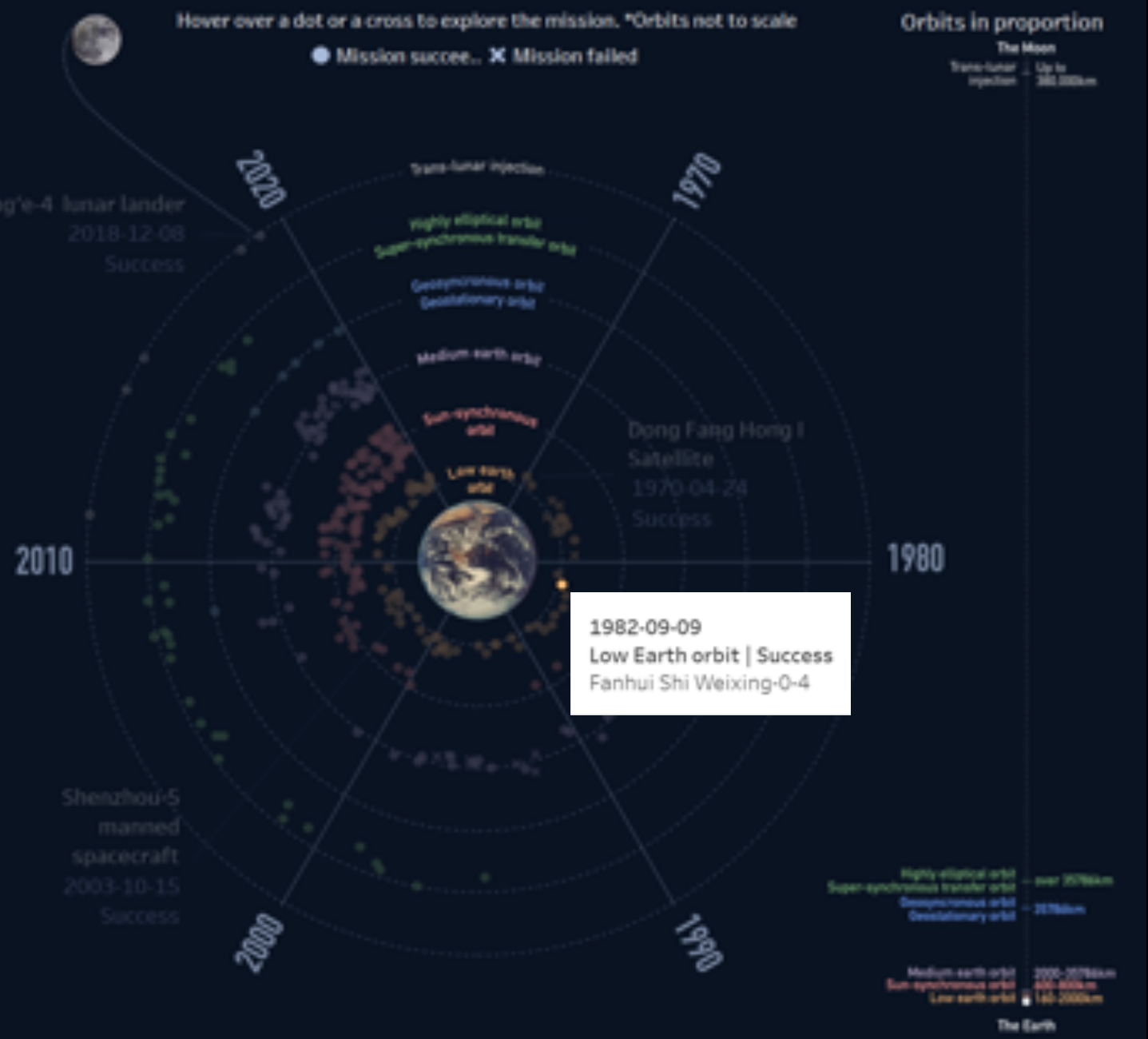
328

Success rate

92.4%

Launch data last updated on 26 July 2019.
Source: www.spaceflightfans.cn/china-space-launch-record
Photo: www.unsplash.com

Wendy Shijia | @ShijiaWendy | 10 Aug 2019



50 years of China's space journey

BOLDLY GO BEYOND THE CELESTIAL

Since the first satellite launched on April 24th, 1970, China has come a long way in her frequency of rocket launches and the spacecrafts' orbital distances. Effective payloads of the rockets have grown from the size of satellites to manned spaceships and lunar probes.

As we speak, China's robotic lunar rover Yutu-2 (Jade Rabbit) is transmitting images and data from the far side of the moon, in preparation for Chinese taikonauts' mission to the moon in 2030.

Total no. of launch

328

Success rate

92.4%

Launch data last updated on 26 July 2019.
Source: www.spaceflightfans.cn/china-space-launch-record
Photo: www.unsplash.com

Wendy Shijia | @ShijiaWendy | 10 Aug 2019

Vis #22

https://youtu.be/X1k4ehOidIA

Out of sight
Out of mind

hello!

I am Alan Hui

01652410

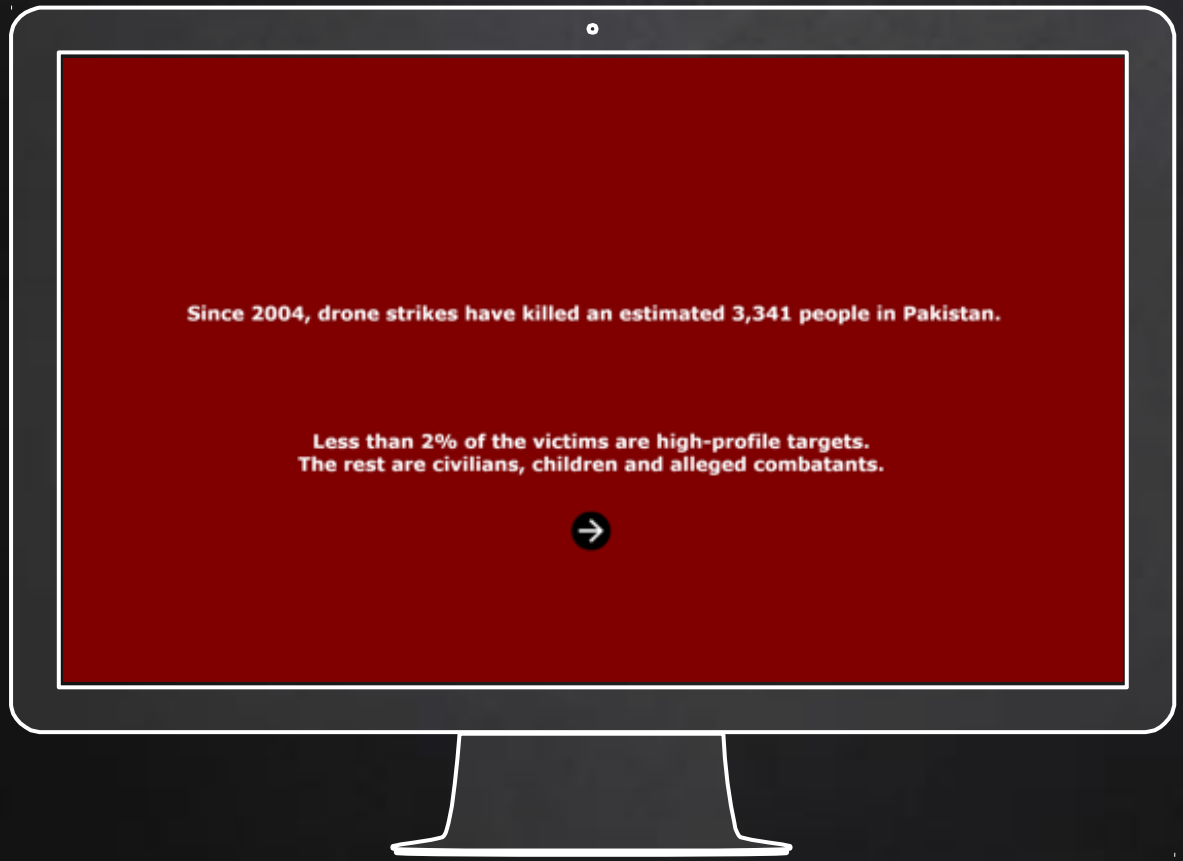
You can find me at slhui@ust.hk

Big Question

Why drone strike?

How effective is the drone strike?

Start from overview

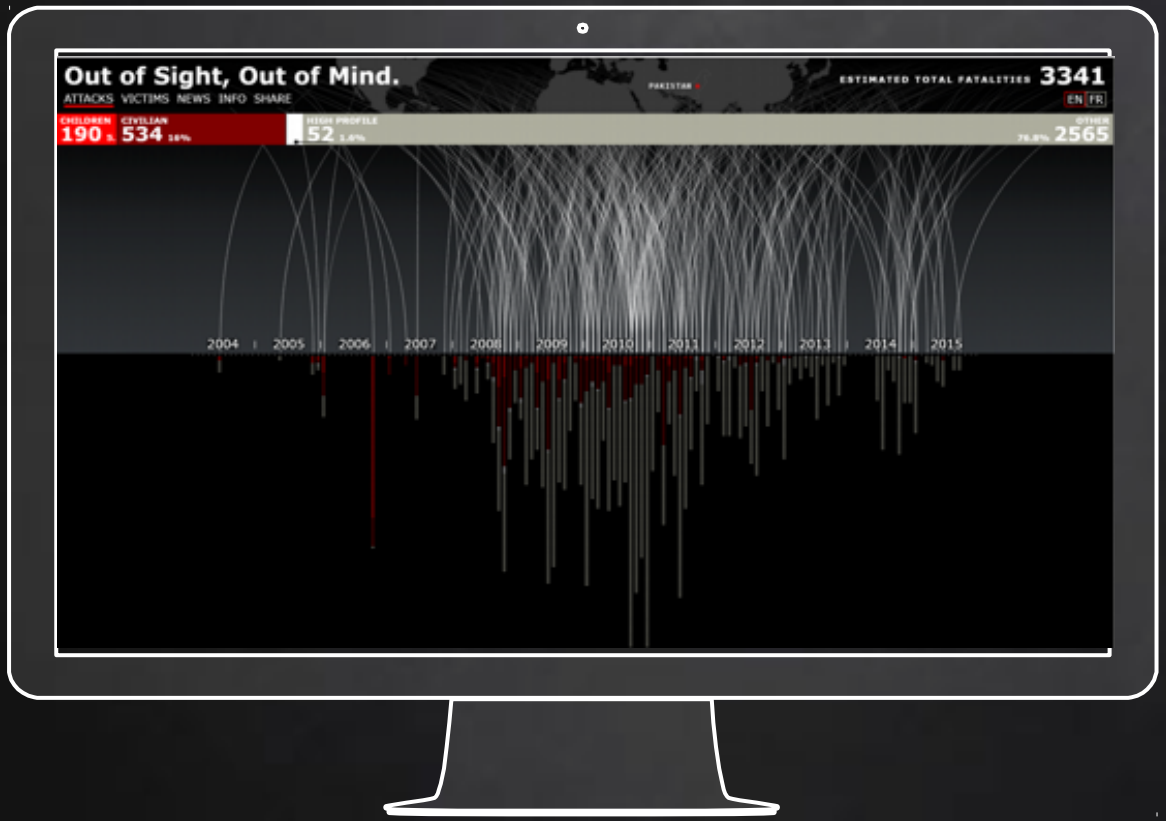


3,341 just a number

2% might be surprising

But not stunning enough…

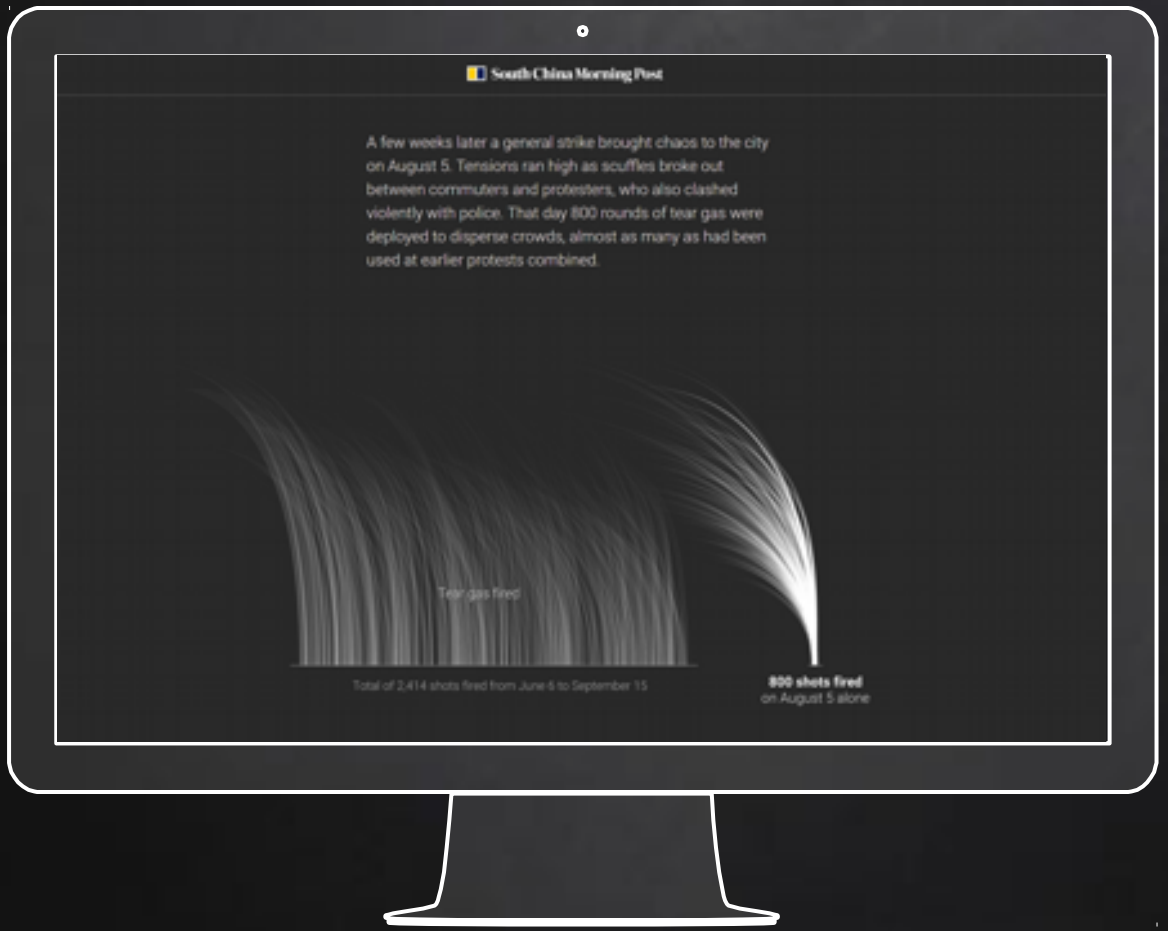
then go day by day



Zoom into Detail data by filtering the date

Another use

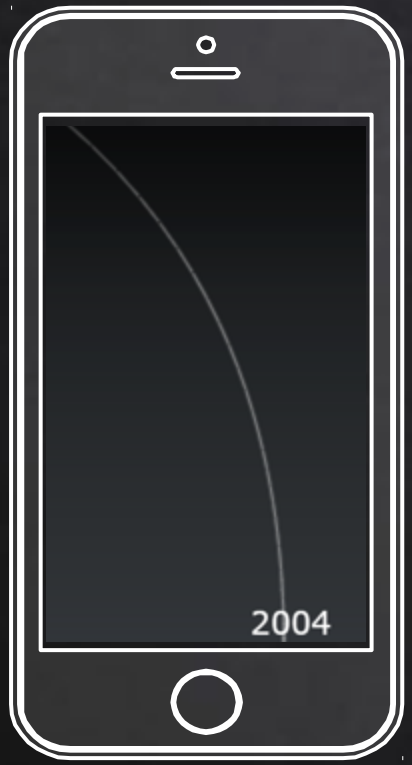
Infographics in News



Numbers are important

But visual impact is more stunning

Encoding



Missile

One White line

Deadbody

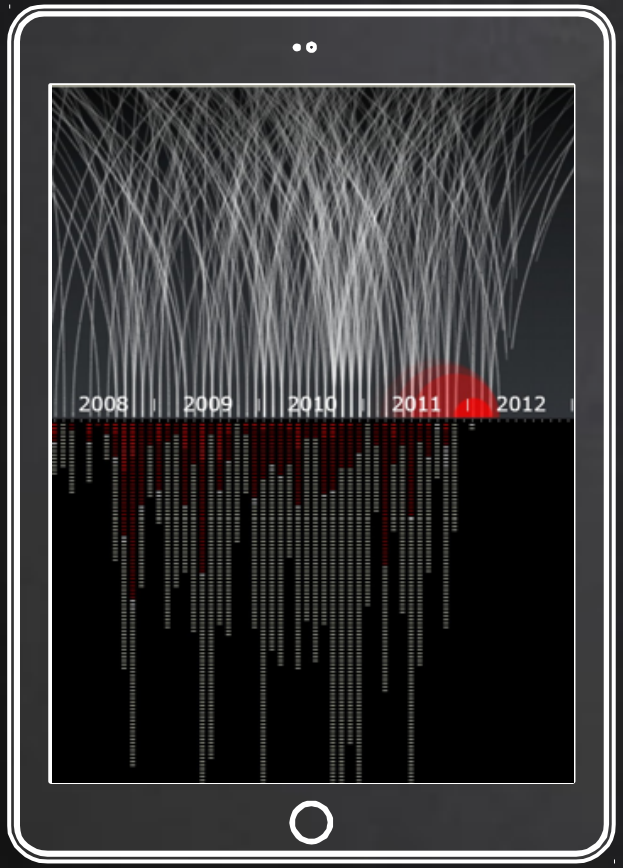
Marks: Rectangle shape

Channel: Number of shape

Color of the shape

Color

RED – Chrildren
Dark red – Civilian
White – High profile
Grey - Others



Visual impact

Density of missile tail

Speed of missile launch

Death of deadbody

From this data visualization, we clearly understand that drone strike is NOT efficient.

True reasons are:

Removes risk of losing American Military -> No news reporting

-> Keeps the world in the dark

-> Take conflict out of sight, out of mind

Credits

- ✘ Out of sight, out of mind
  https://drones.pitchinteractive.com/
- ✘ SCMP Infographics
  https://multimedia.scmp.com/infographics/news/hong-kong/article/3027462/hong-kong-100-days-of-protests/index.html

thanks!

Any questions?

Vis #23

https://youtu.be/Uhs5kmdGGwA

SELFIECITY VISUALIZATION

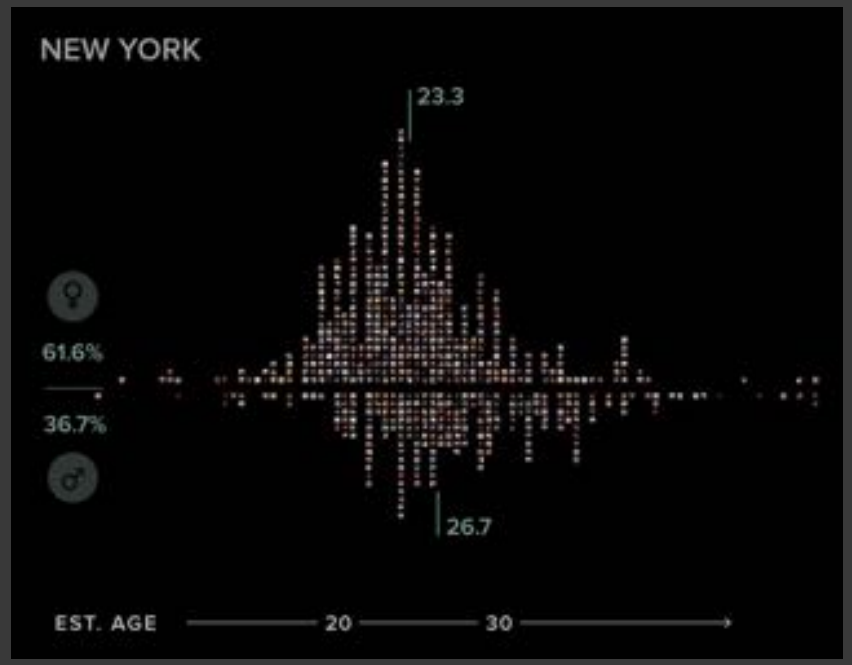
Name: Hu Yifei

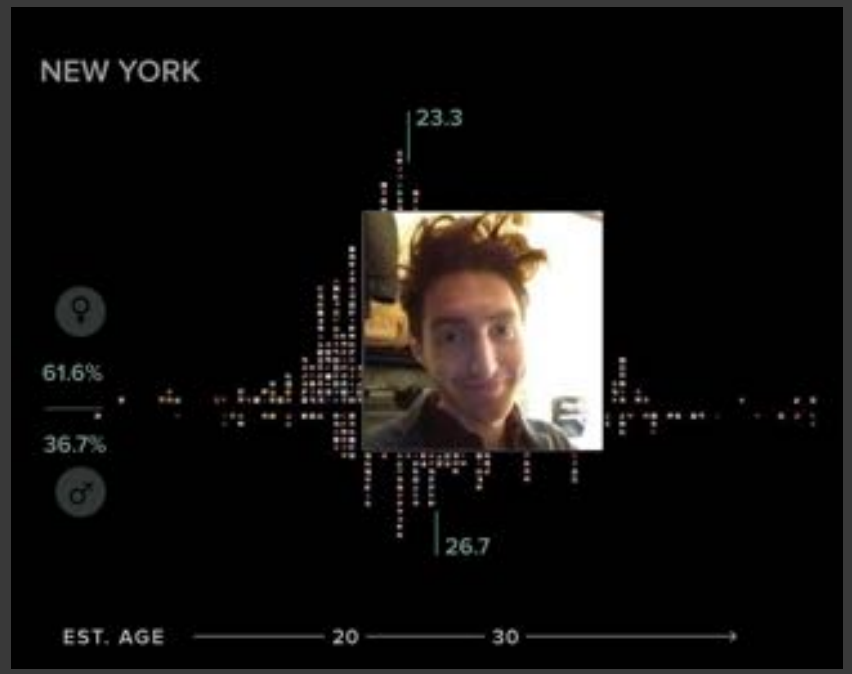
SID: 20627763

Source: http://selfiecity.net/

GENDER AND AGE PRO FILES PER CITY

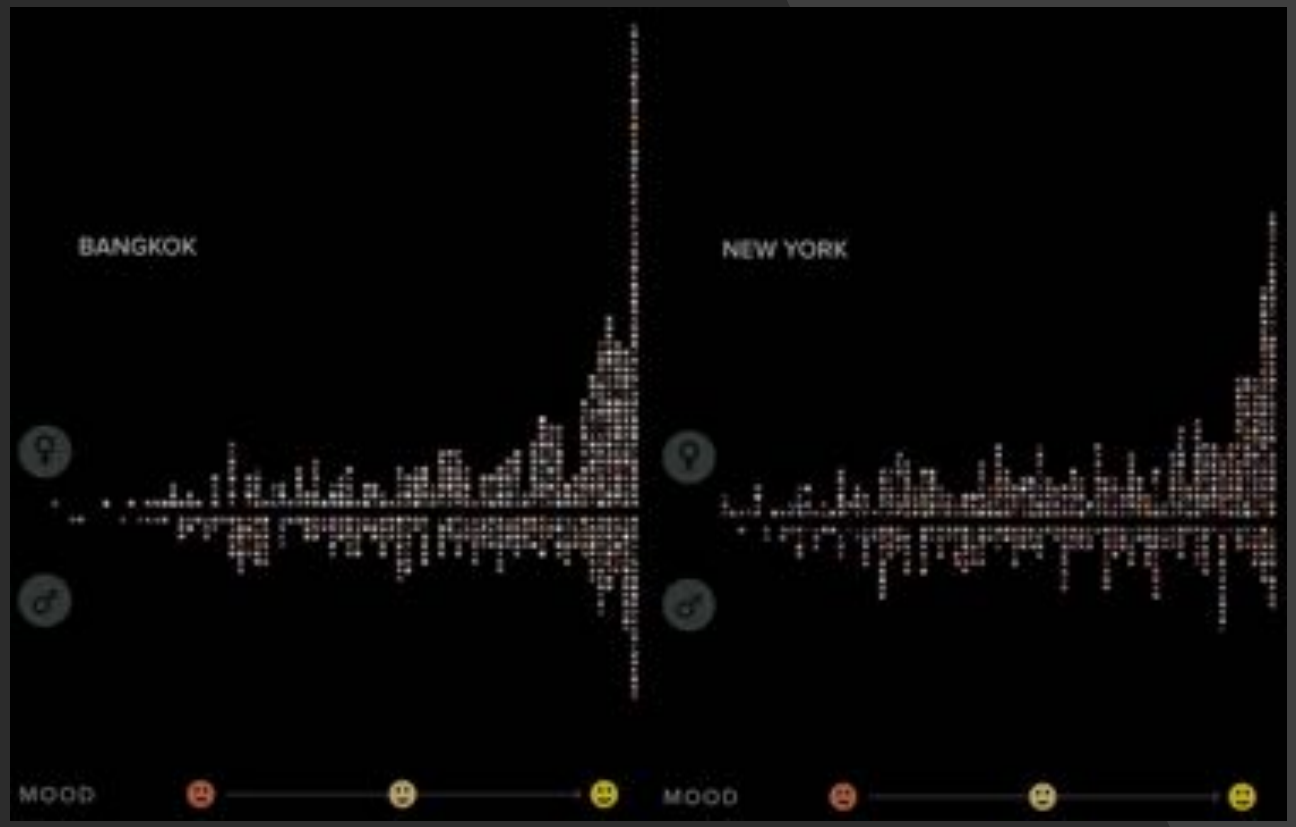
- Use histogram to do this visualization.
- The x-axis is age, and the y-axis is the number o f the photos.
- Above the x-axis is the data of women, below th e x-axis is the data of men.
- Each point is a photo, when we put the mouse o n this point, we can see the enlarged picture of t his photo.





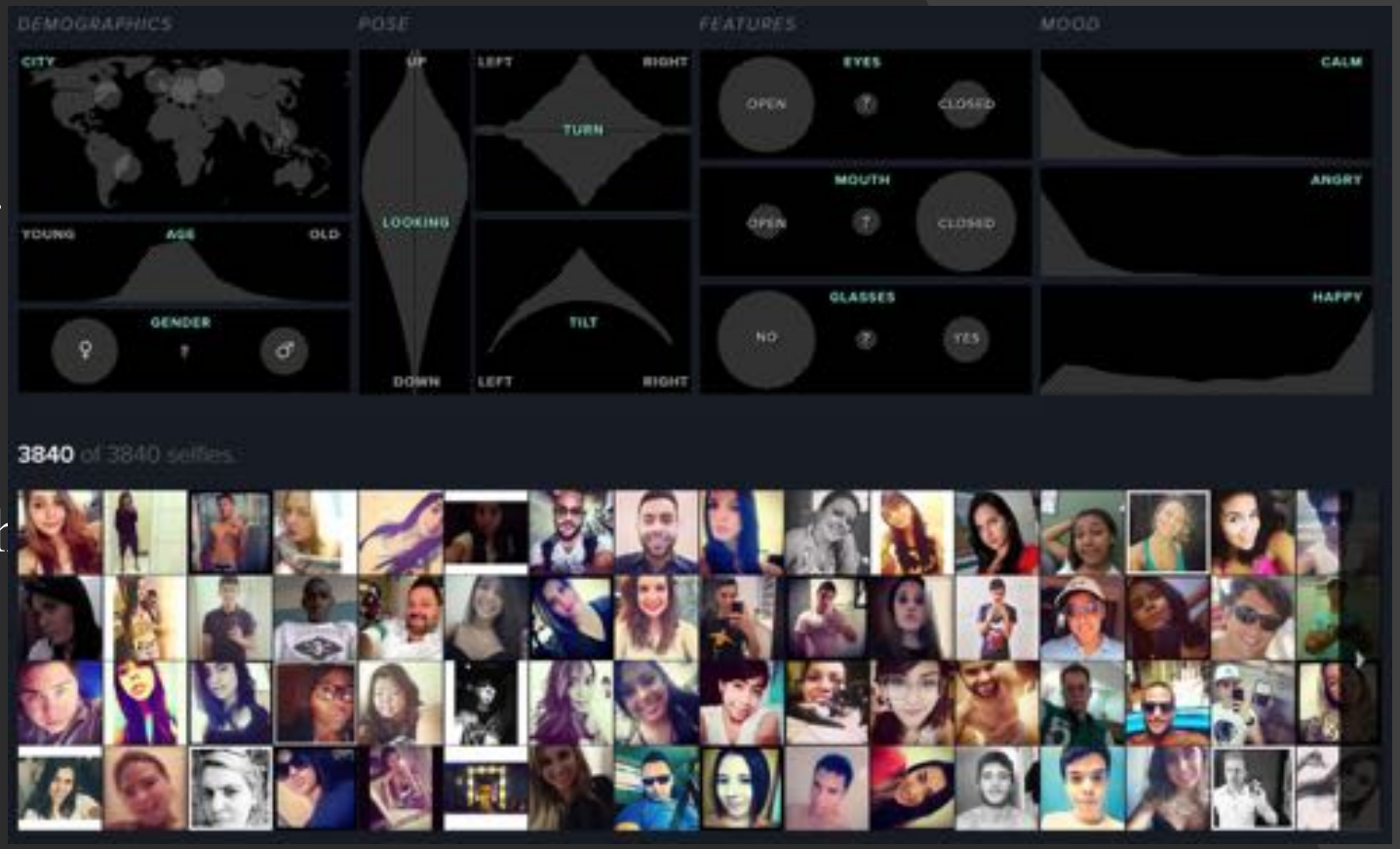
SMILE DISTRIBUTIONS BY GENDER AND CITY

- Also use histogram to do this v isualization.
- X-axis is mood and y-axis is nu mber of the photos.
- We can see that people of Ban gkok are more likely to smile w hen take selfies than people in New York, and women smile m ore than men.



THE SELFIEXPLORATORY

- Do angry people tilt their heads more strongly?
- What is a characteristic mood for people in Moscow?
- Use the system on the right to find the answer.

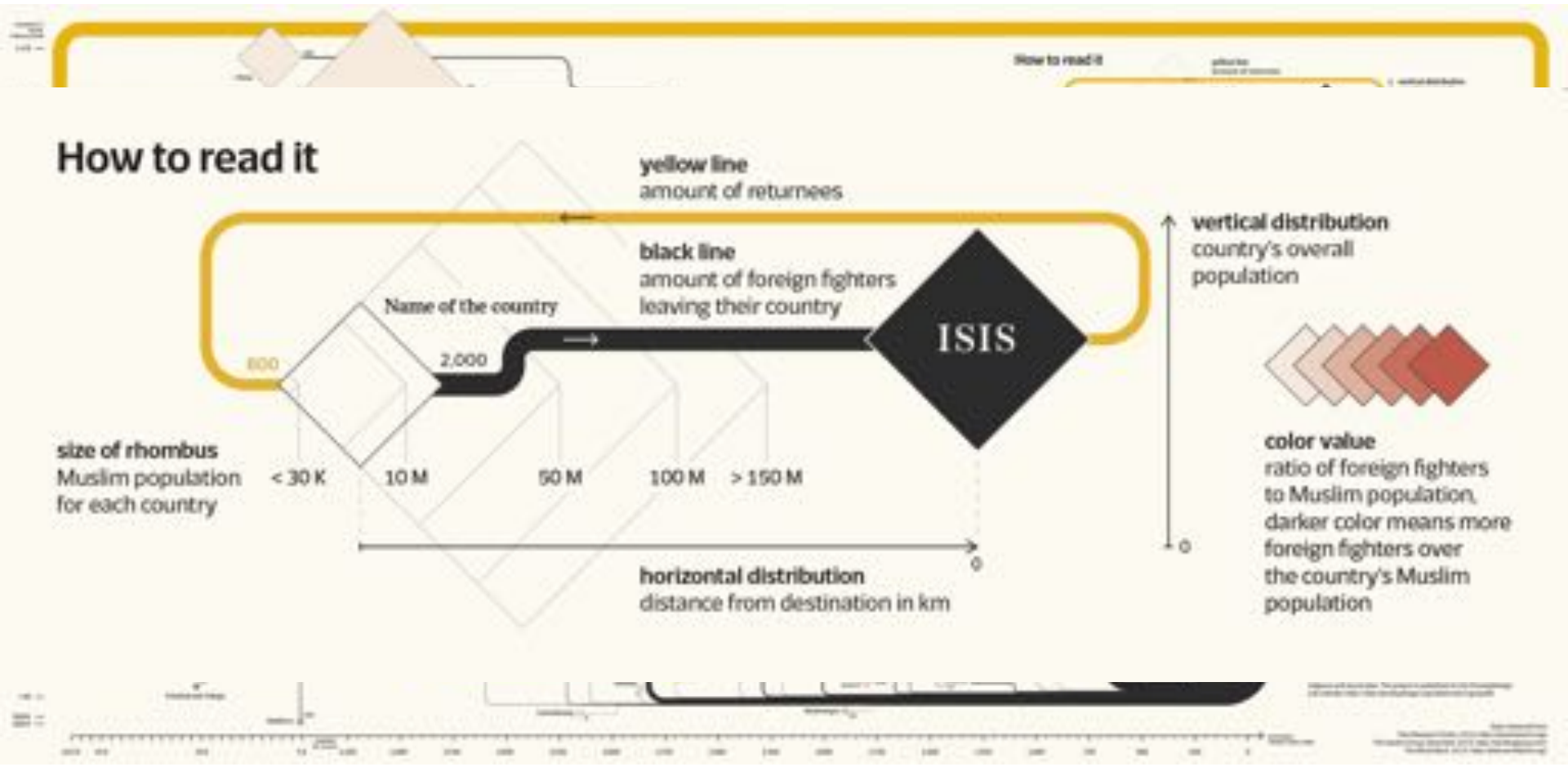


Vis #24

https://youtu.be/pvvZvLP_qJY

On Their Way: the Journey of Foreign Fighters

JIN Fenglei
Hong Kong University of Science and Technology

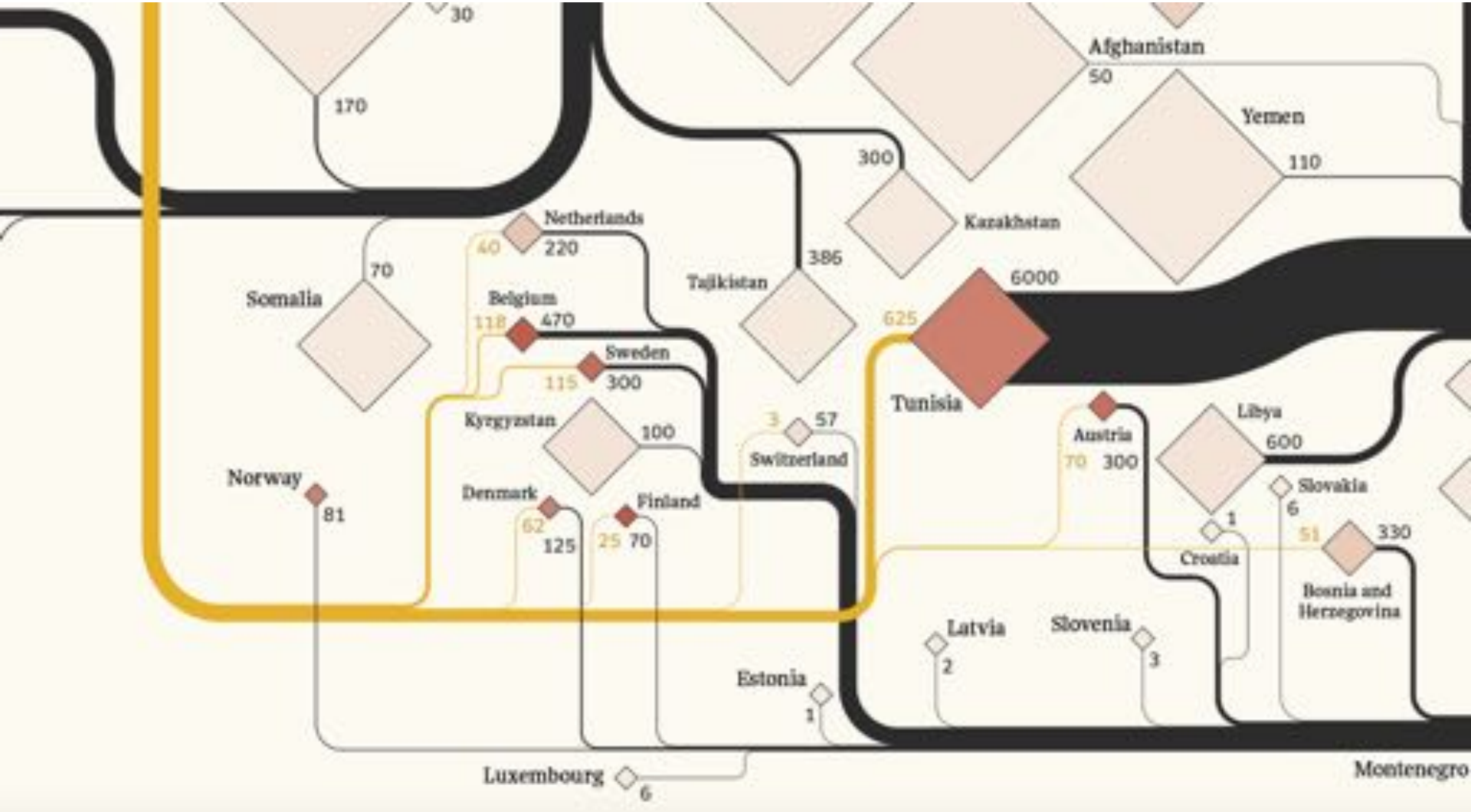


BEST OF SHOW

----MALOFIEJ 25 AWARDS

STUDIO OF THE YEAR

----KANTAR IIB AWARDS 2017



- Orange vs Black: high contrast
- High information density
- Practical significance

Thank You!

Vis #25

https://www.youtube.com/watch?v=IPLAjW8cL-E

Pixel chart

Kevin Kwong

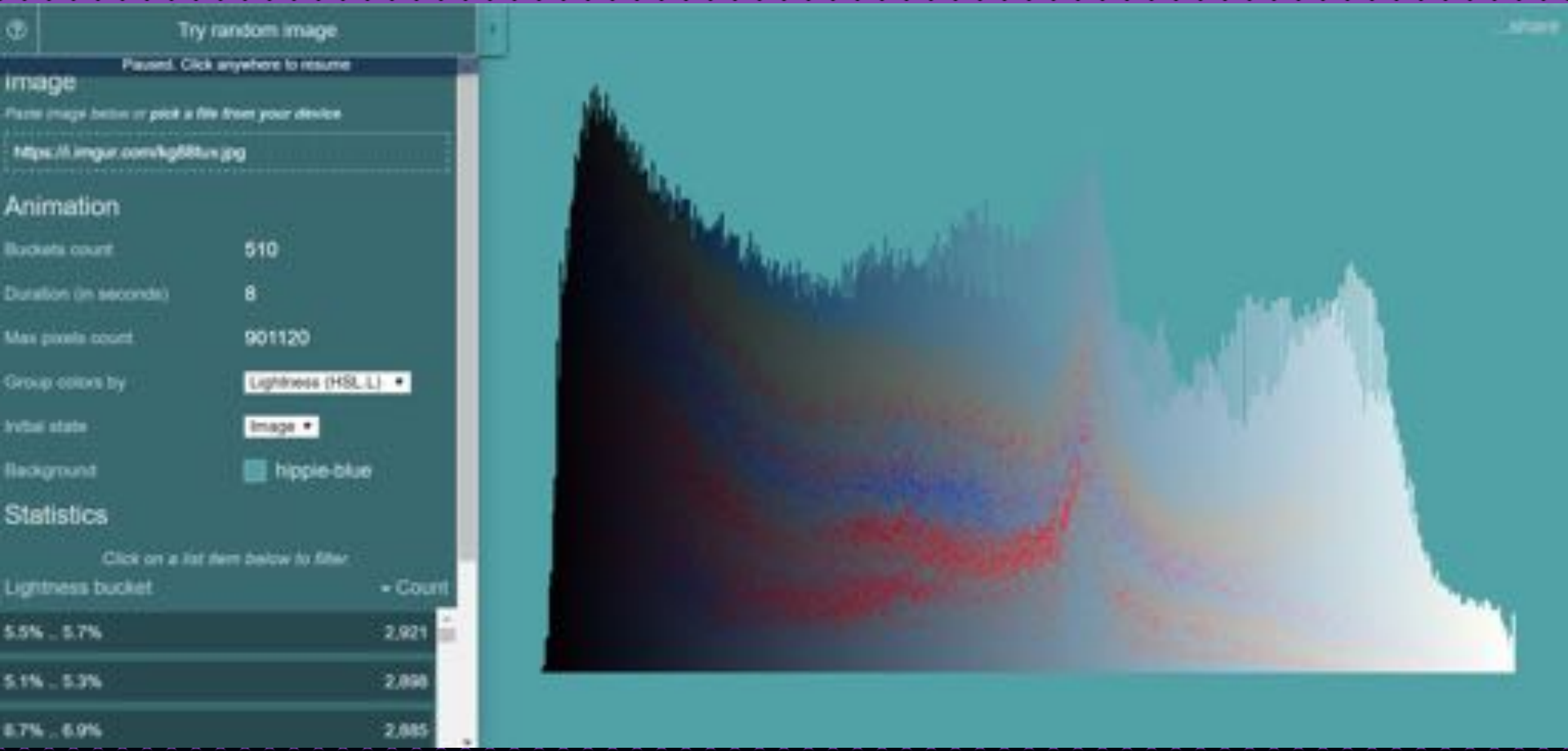
Try random image
Image
Paste image below or pick a file from your device
https://i.imgur.com/kpx1YfP.jpg
Animation
Buckets count
510
Duration (in seconds)
8
Max pixels count
901120
Group colors by
Lightness (HSL L)
Initial state
image
Background
hippie-blue
Statistics
Click on a list item below to filter
Lightness bucket
Count
47.1% .. 47.3%
9,577
46.7% .. 46.9%
8,916
46.3% .. 46.5%
8,570
25

INTRODUCTION – pixel chart

- × A simple tool to decompose any picture into thousands of pixel
- × Not a fancy page with lots of interaction
- × Wonderful animation

https://anvaka.github.io/pixchart/?d=4

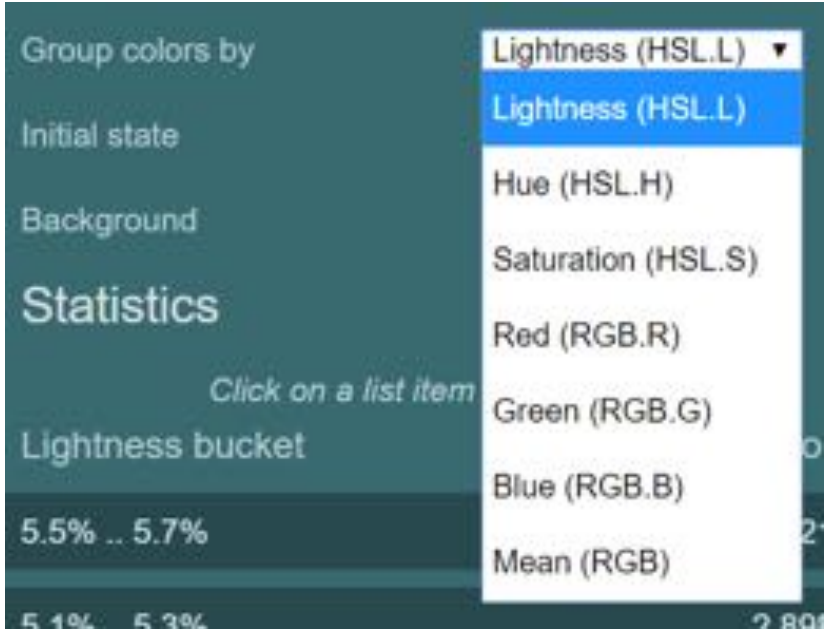
Try random image
Paused. Click anywhere to resume
image
Paste image below or pick a file from your device
https://i.imgur.com/kg88tuv.jpg
Animation
Buckets count
510
Duration (in seconds)
8
Max pixels count
901120
Group colors by
Lightness (HSL.L)
Initial state
Image
Background
hippie-blue
Statistics
Click on a list item below to filter
Lightness bucket
Count
5.5% .. 5.7%
2,921
5.1% .. 5.3%
2,898



https://anvaka.github.io/pixchart/?d=4

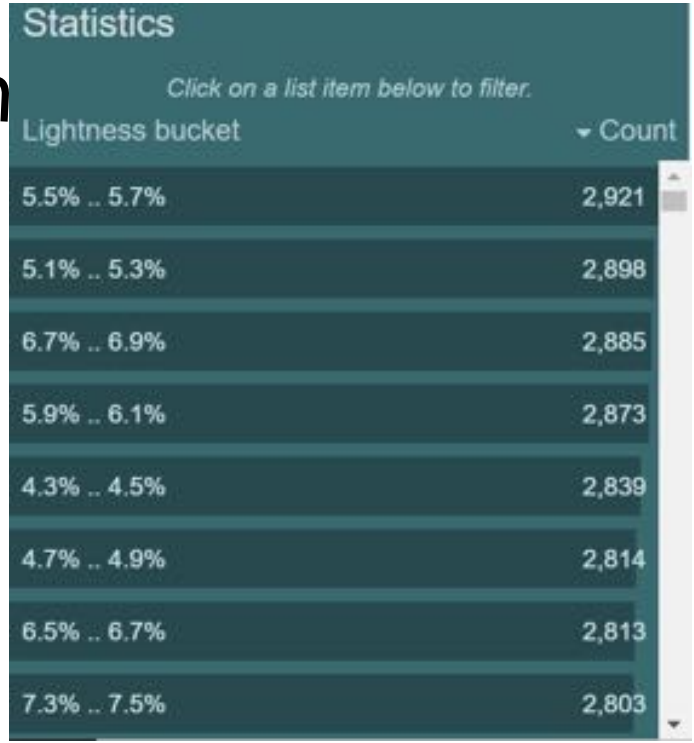
Group by

- × Lightness
- × Hue
- × Saturation
- × RGB



Pixel decomposition

- Pixels are decomposed at every 0.2% interval
- Pixel count for different level
- Understand more about the component of picture



Reference

https://anvaka.github.io/pixchart/?d=4

THANKS!

Vis #26

https://youtu.be/Vuczgrp6MQM

MSBD 5005
Top Vis Competition

Name: Alan Yu Hsien Lai

SID: 20670083

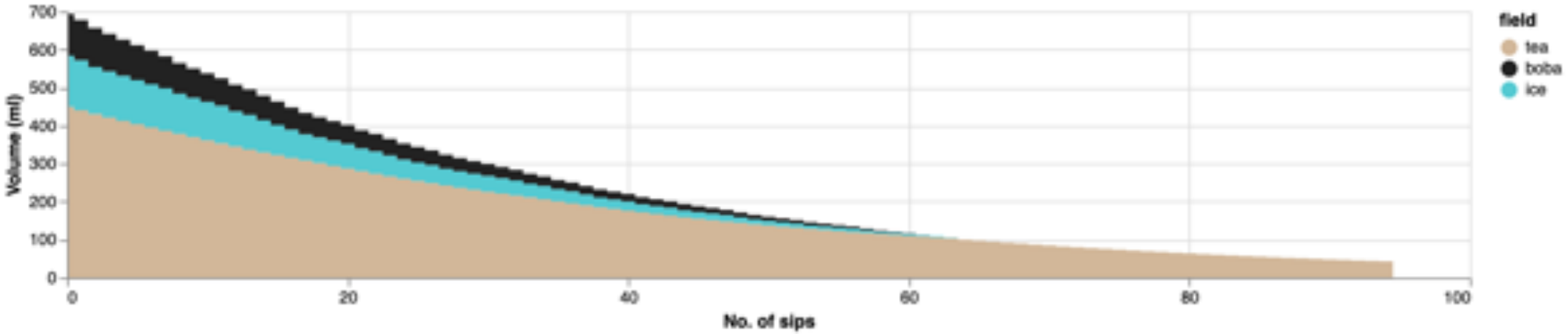
Data Science in Bubble Tea

Boba Science by Krist Wongsuphasawat

Question stated: *with what drinking style can we finish boba and tea simultaneously?*

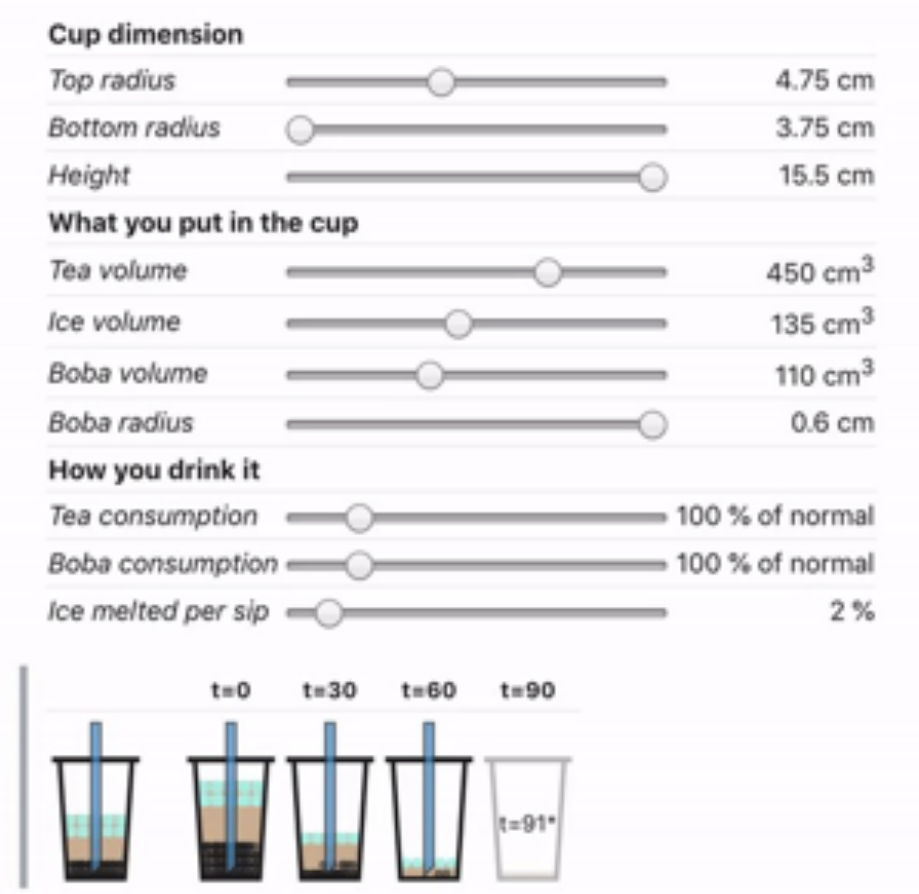
In the below graph:

- **Brown**, **Blue**, **Black** represents the level of **Tea**, **Ice** and **Boba** in the cup respectively
- x-axis: number of sips, y-axis: remaining volume



Why a Top Vis?

- Intuitive, easy to understand
- Meaningful color scheme
- Interactive & customized
- Feedback available
- A trend, a culture, a daily life problem



Play around with your own drinking style!

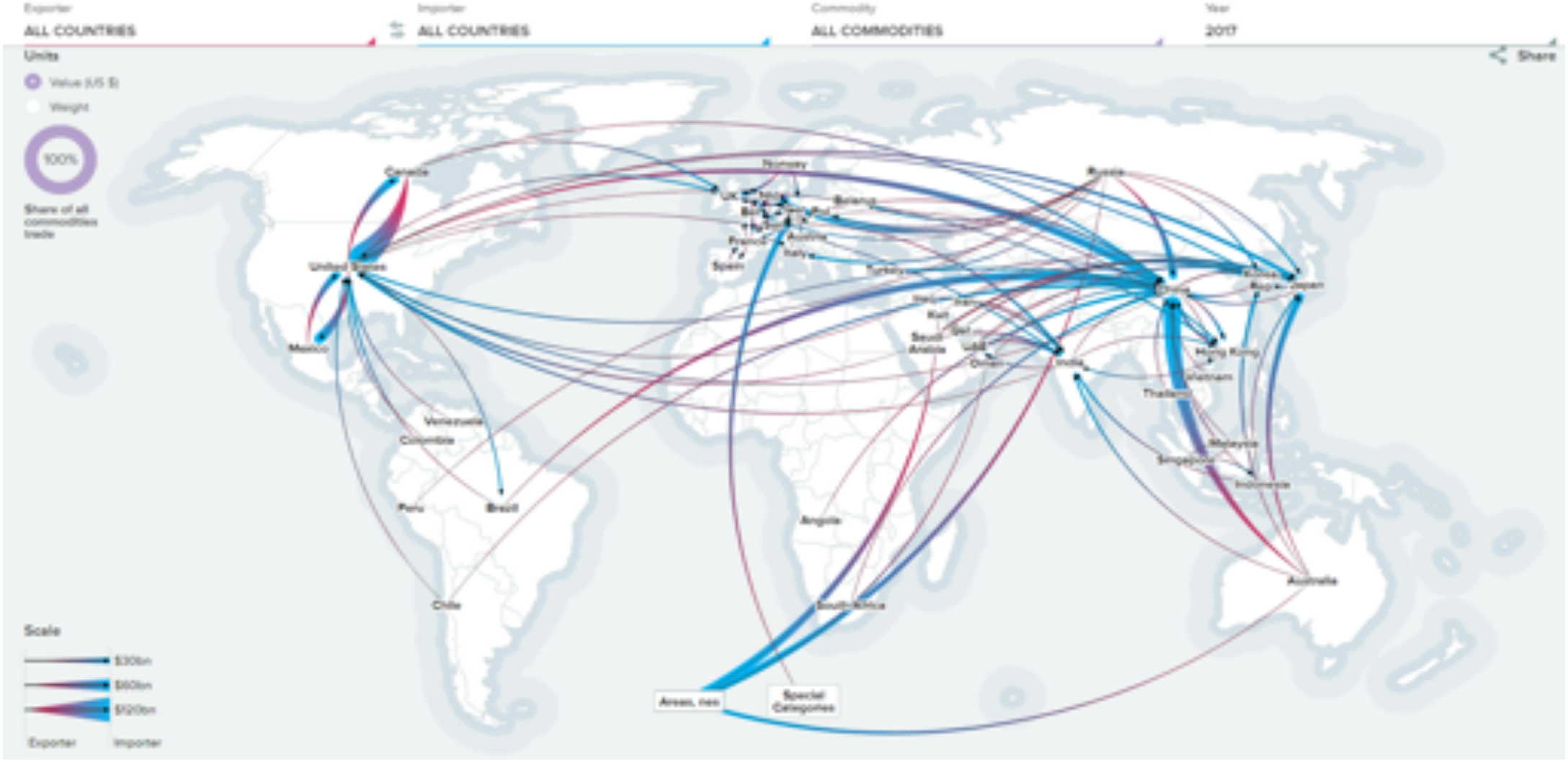
Reference and credits to: https://observablehq.com/@kristw/boba-science

Vis #27

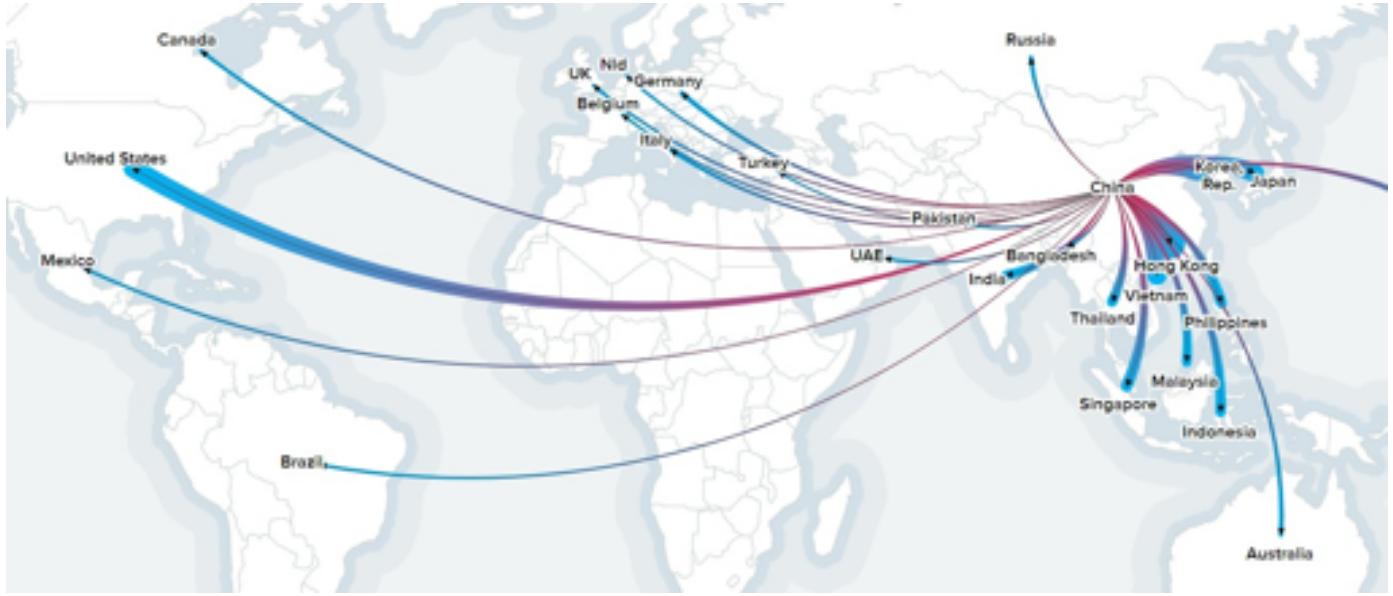
https://youtu.be/t5rugQHsxzk

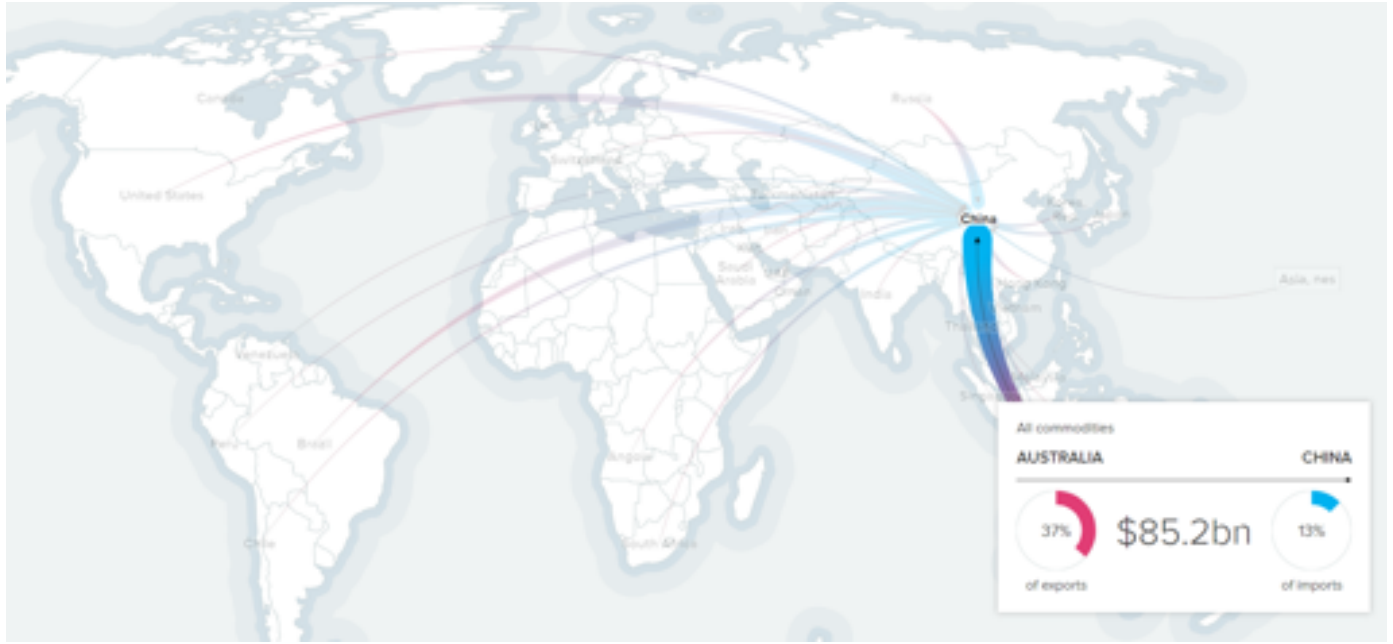
Lai Wendi

World Resource Trade Data Visualization



Source: https://resourcetrade.earth/data



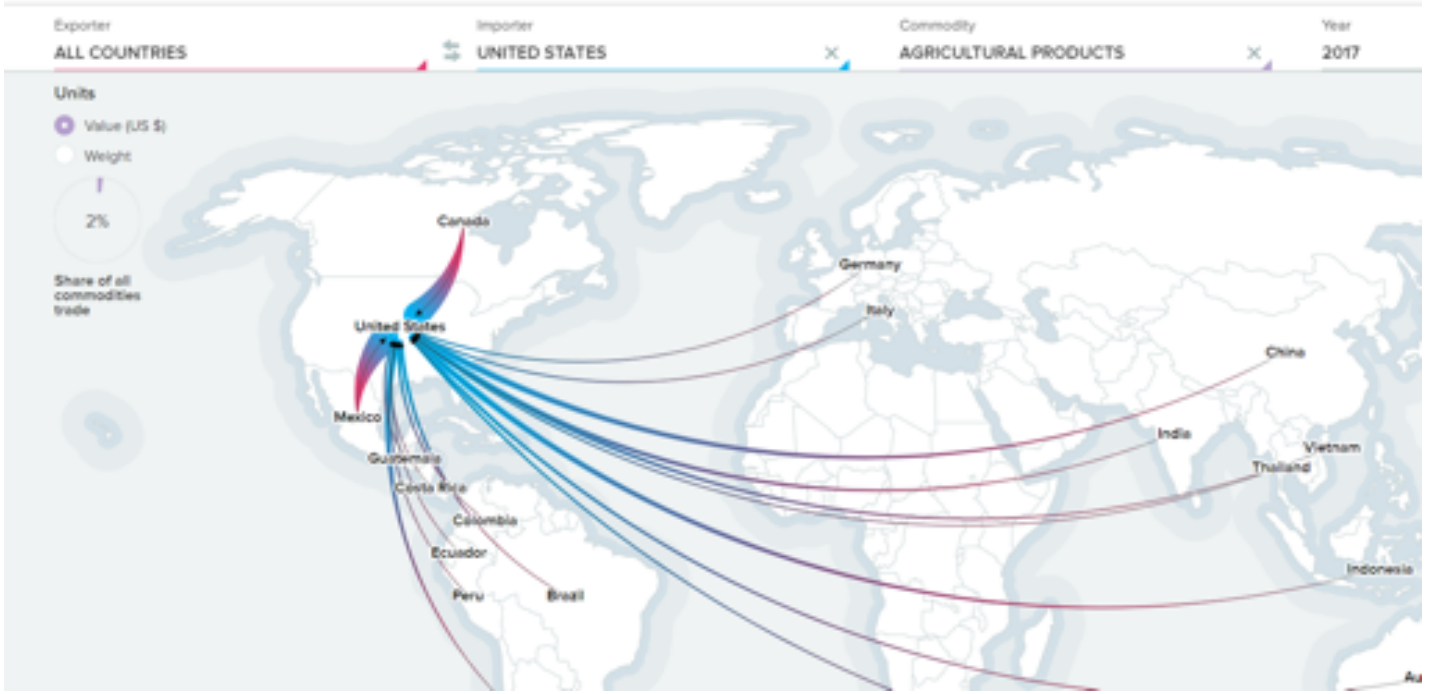


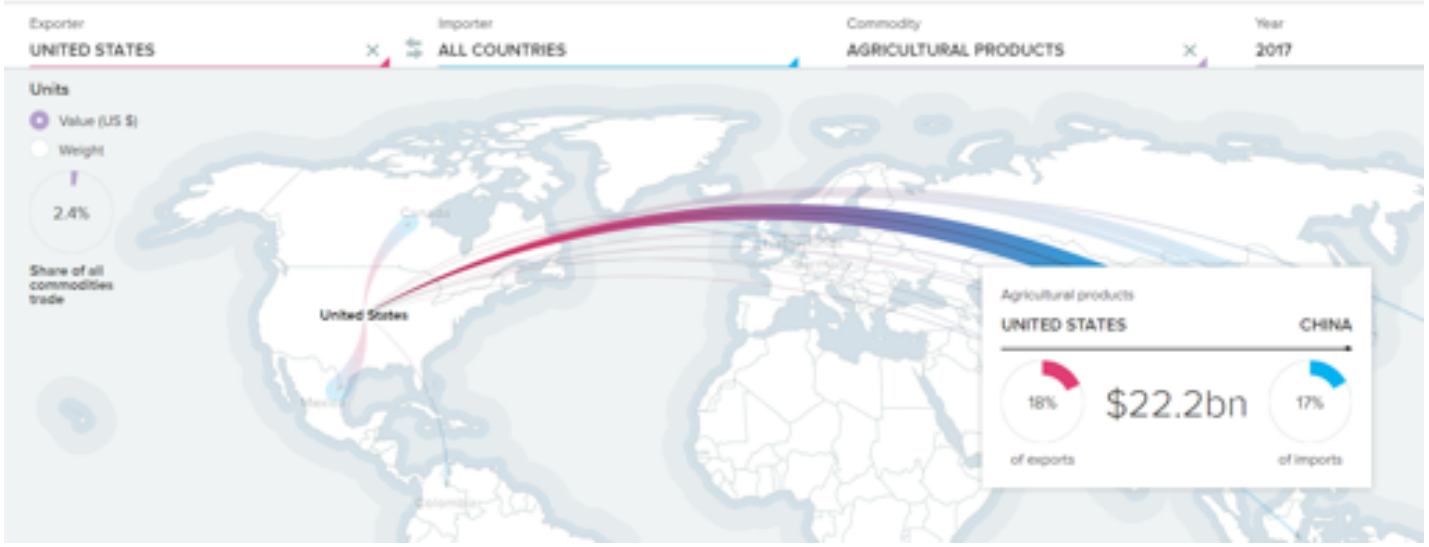
Encoding scheme

- Red to blue represents exports to imports, from narrow to wide makes it like an arrow
- The width of the output of each line represents the scale of the resource
- Countries are directly represented by the map

China

- Most of the resources export to East Asia and Southeast Asia
- The largest import comes from Australia





US

- Most of the agricultural products comes from Canada and Mexico
- Most of their agricultural products exports to China

Why it is impressive?

- The world map provides us an intuitive image of all the trades between countries
- We can directly find out those countries who act as significant role in the world trade
- We can also focus on one country, even one trade product, and analyze their main companion clearly

Vis #28

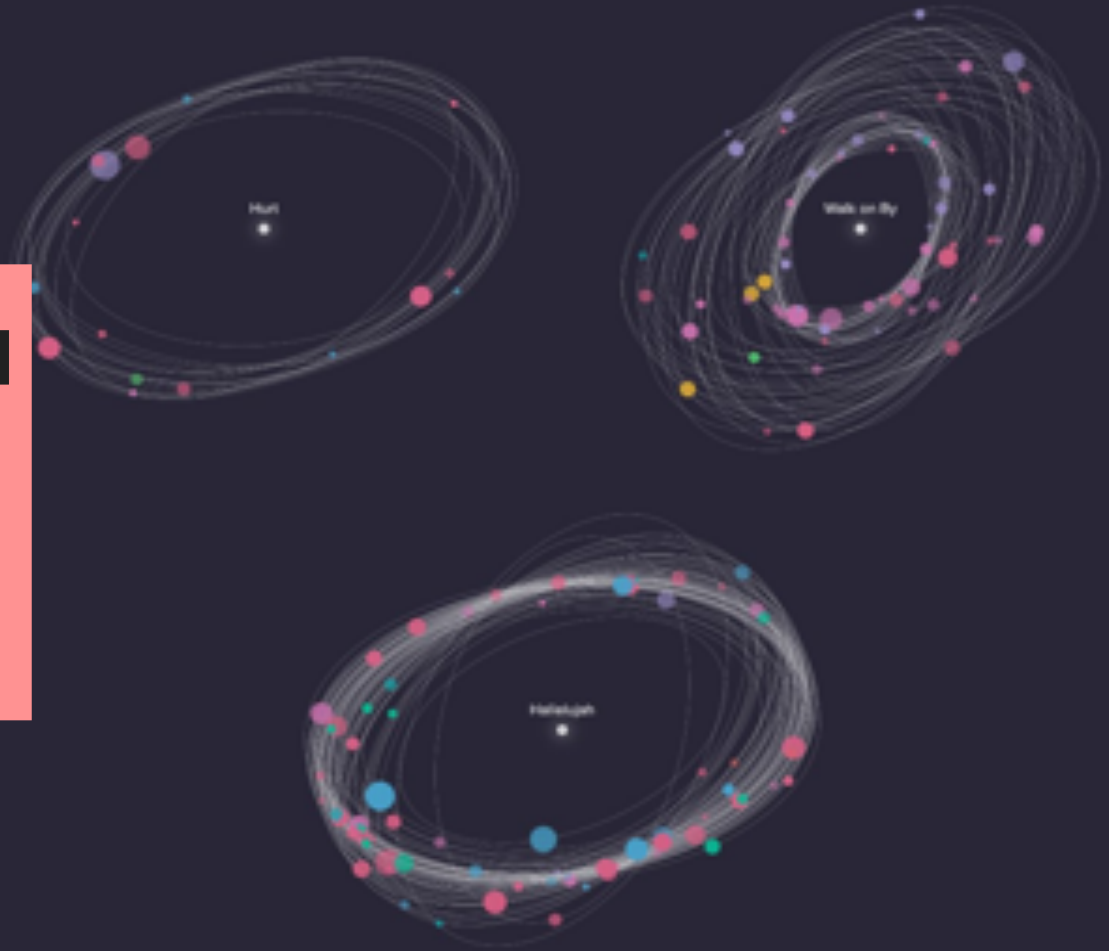
https://youtu.be/3zXHqs6wbUU

GALAXY OF COVERS

By Tania Boa, Ilya Boyandin, Mark Hintz, Jan Wächter, and Benjamin Wiederkehr

INSPIRATION

Our most beloved songs have a longer history than we might think. They might exist in hundreds of alternative versions created by other artists in distant decades.Those versions can differ in character and style and reach completely different audiences.



To honor the evolution of the 50 most popular cover songs of all time, Galaxy of Covers looked closely at the 50 most popular cover songs as well as the original works.

— ABOUT the TASK —

POPULARITY

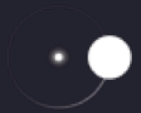
A measure of the popularity of song

TEMPO

The speed of the song

VALENCE

A measure of the attitude of the song - high valence means a positive attitude, and low means a more negative one



ENERGY

A measure of the energy and force of the music

SPEECHINESS

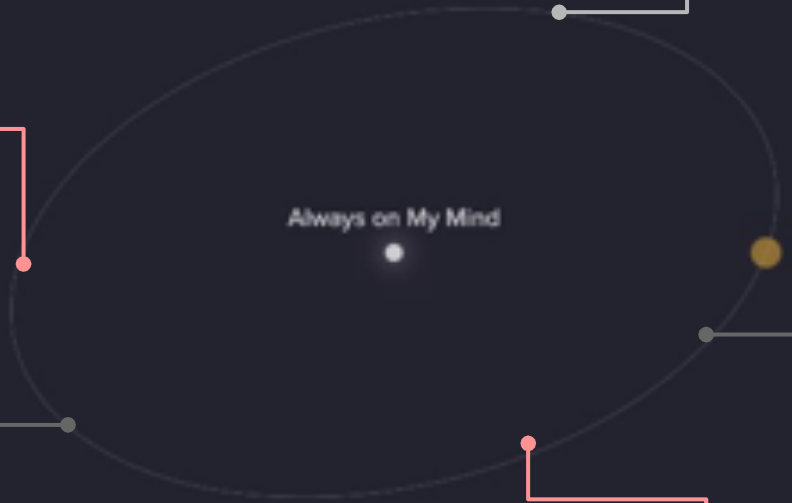
A measure of how close the song is to ordinary speech

PANORAMA VIEW

The panorama view shows the 50 top songs as individual planetary systems with the original work as the sun. Each planet represents a version of the song and it’s appearance indicates characteristics including genre, popularity, tempo, valence, energy, and speechiness. The radius of its orbit around the sun shows the years between the publication dates. This view allows you to compare the structure and density of the constellation of different songs from a high-level perspective.

Tempo is encoded by the speed of orbital revolution.

Valence is encoded by the Orbital inclination, i.e the angle between a reference plane and the orbital plane or axis of direction of the orbiting object.



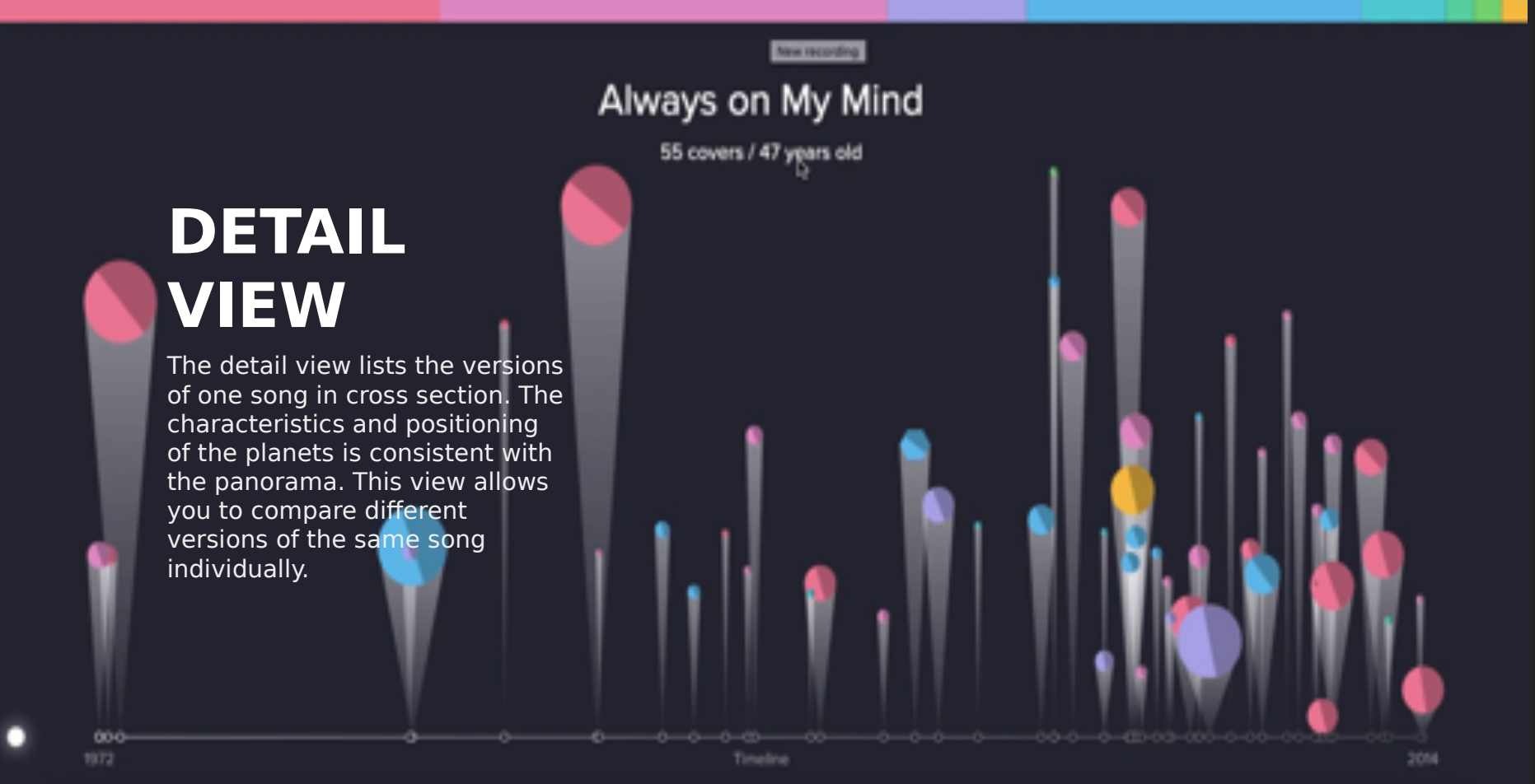
Speechiness is encoded by the shape of orbit.

Energy is encoded by the flicker frequency of orbit.

Genre and popularity are encoded by the color and the size of orbit respectively.

DETAIL VIEW

The detail view lists the versions of one song in cross section. The characteristics and positioning of the planets is consistent with the panorama. This view allows you to compare different versions of the same song individually.



THANKS

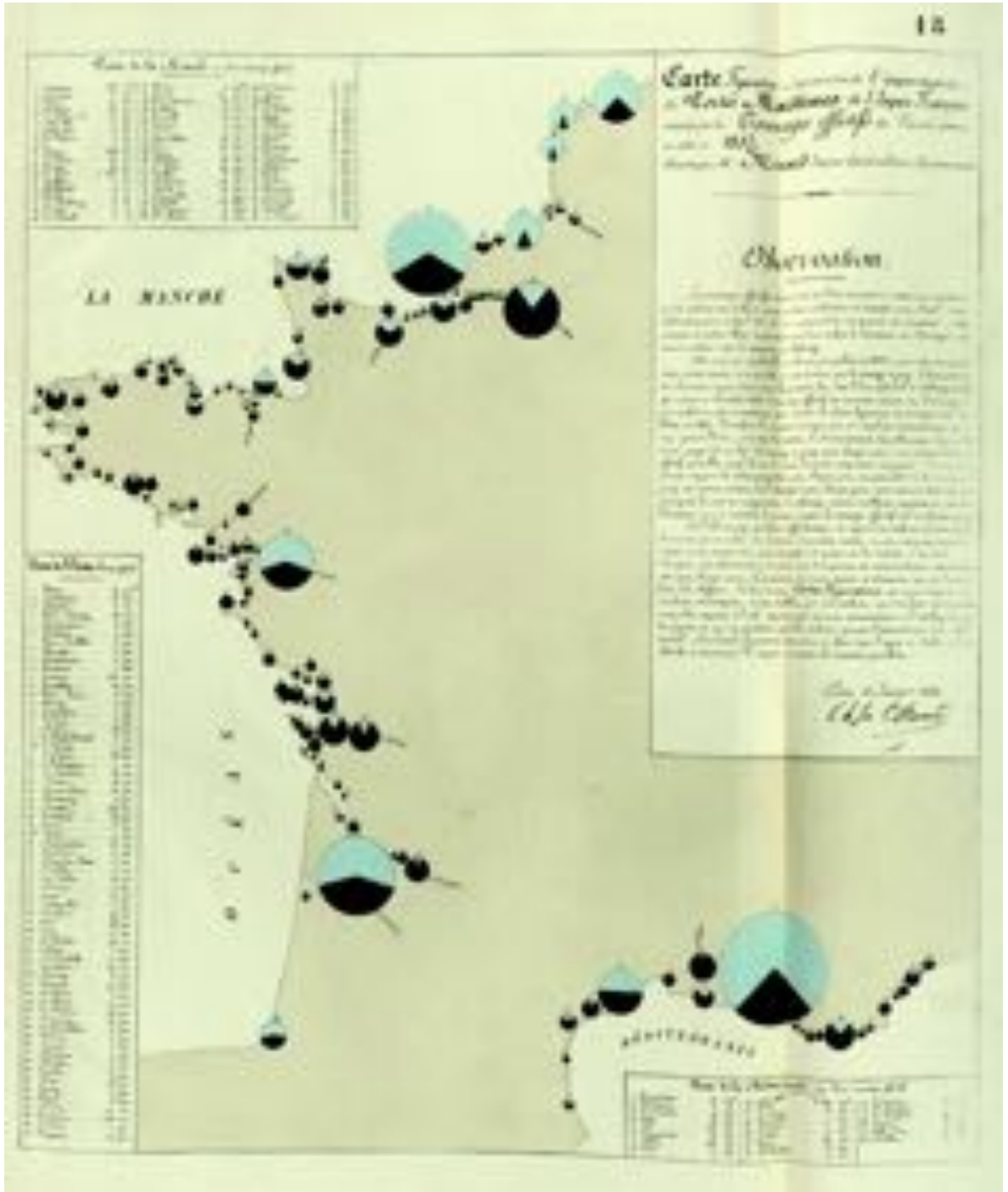
The original visualization is on:
https://galaxy-of-covers.interactivethings.io/

klauak@connect.ust.hk
2064 7191

Vis #29

https://youtu.be/qMUZKB6GyXM

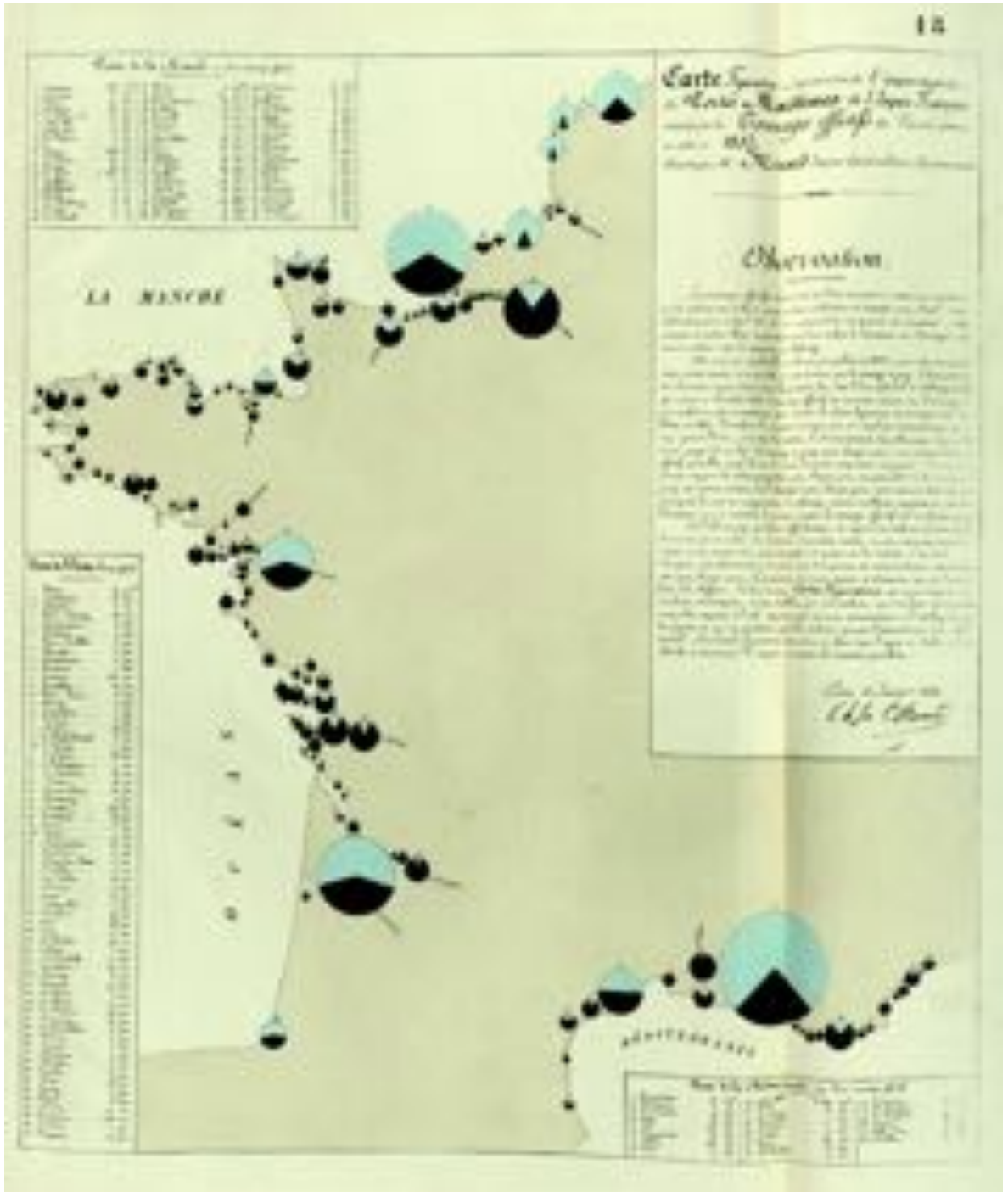
Lee Chi Yin



Maritime Ports in France in 1857

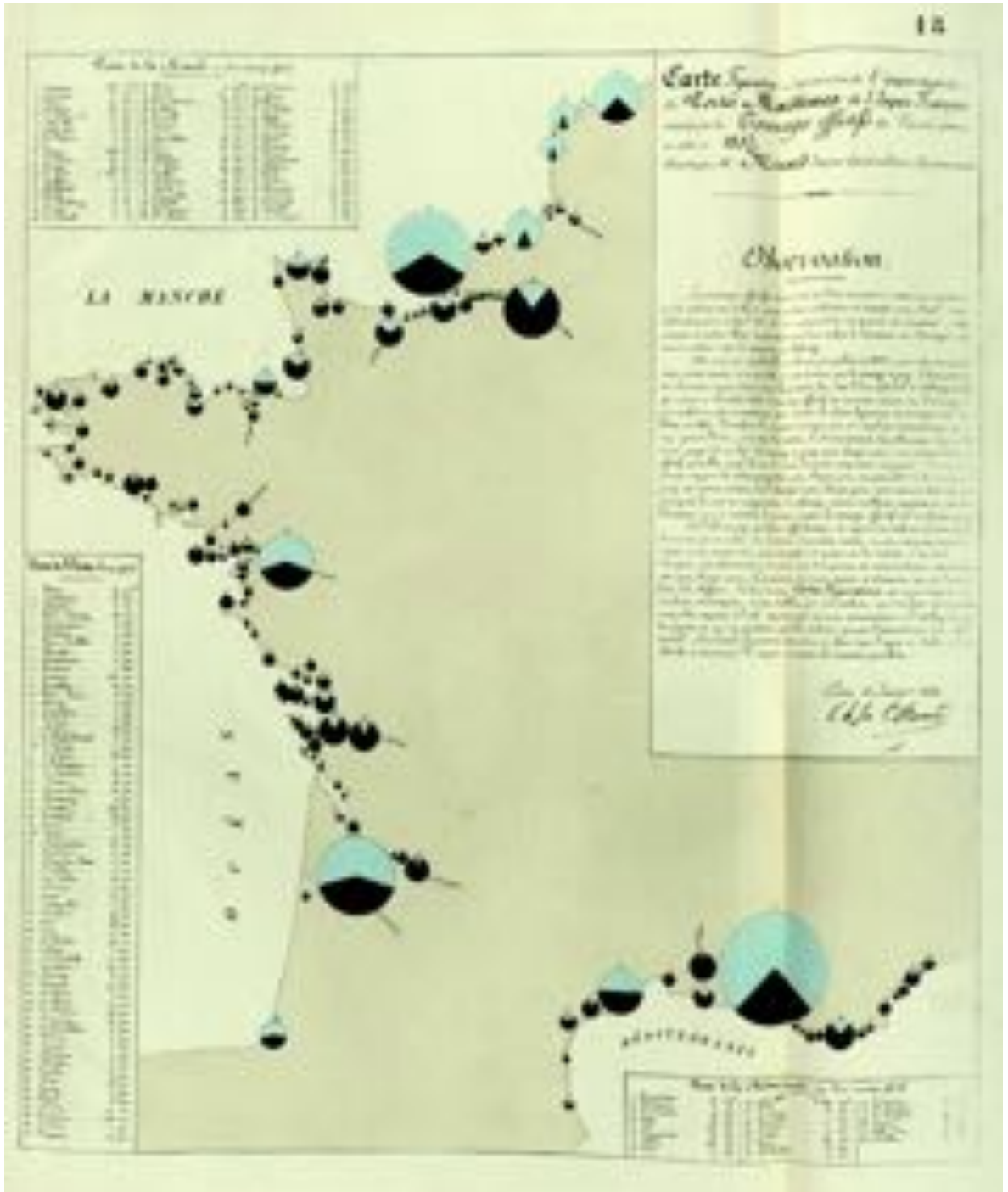
by Charles Joseph Minard

Lee Chi Yin - 20489288



Multi-variate visualization in one chart

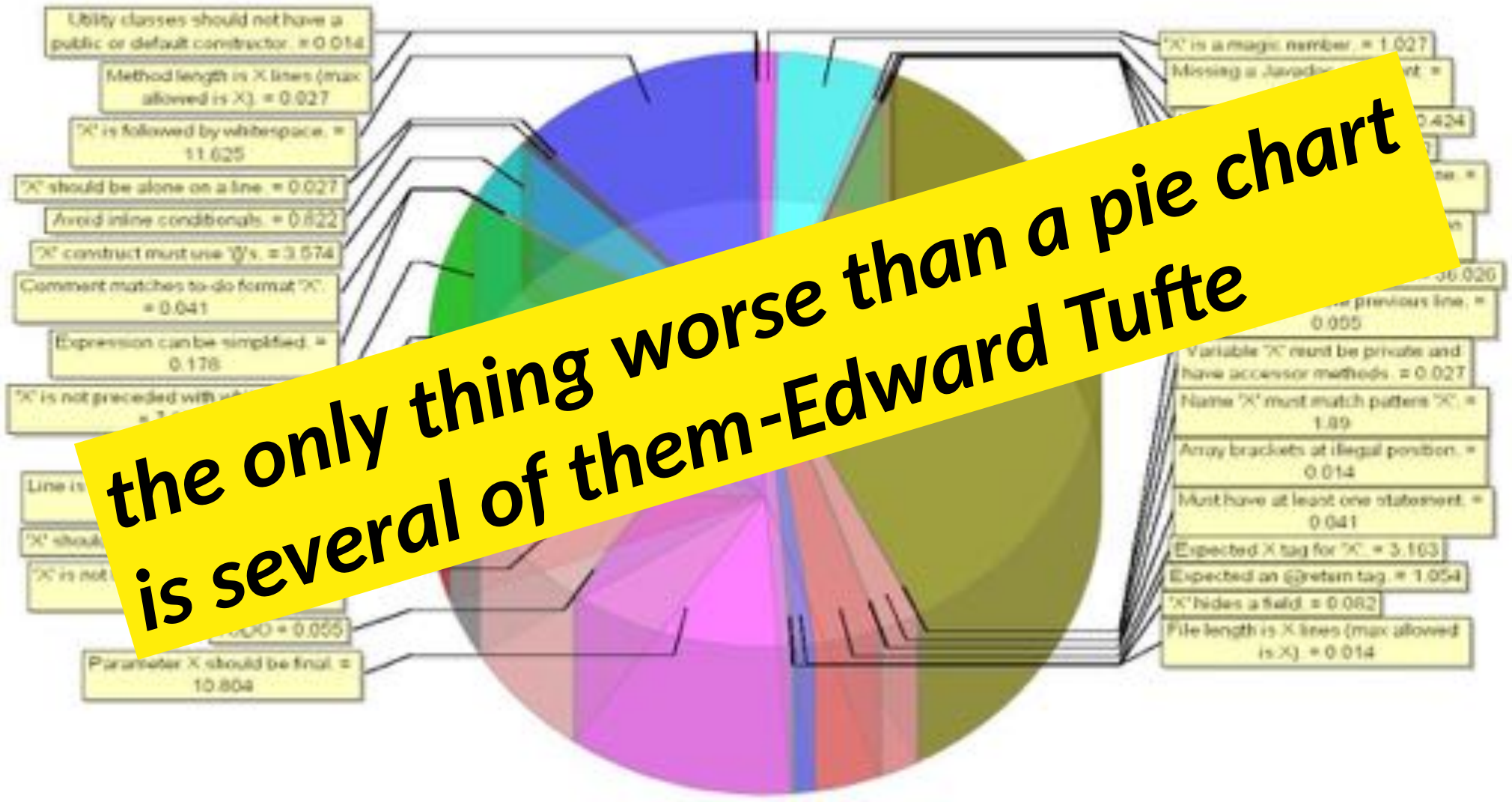
- Actual tonnage
  proportional to size of circle
- Ratio b/w international and domestic traffic
  represented by blue/black section of pie chart
- Location
  illustrated by the map



Aim of the figurative map:

O Exhibit exact statistical results
- Size and pie is not good at exhibiting exact measures

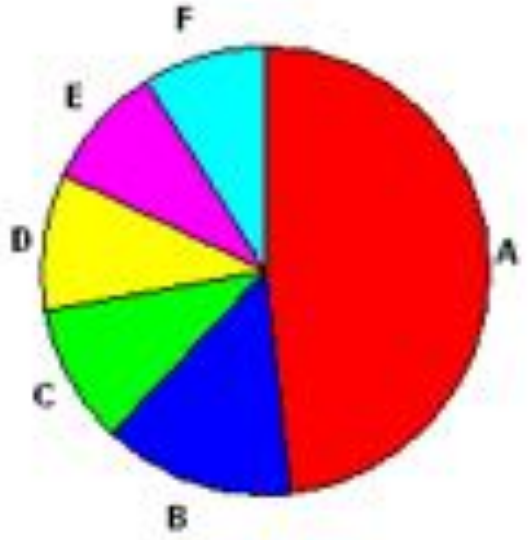
P Make relationship and comparison quickly apparent to eye
- Large port mainly handle international goods while small ports handle domestic goods
- Small ports located in clusters



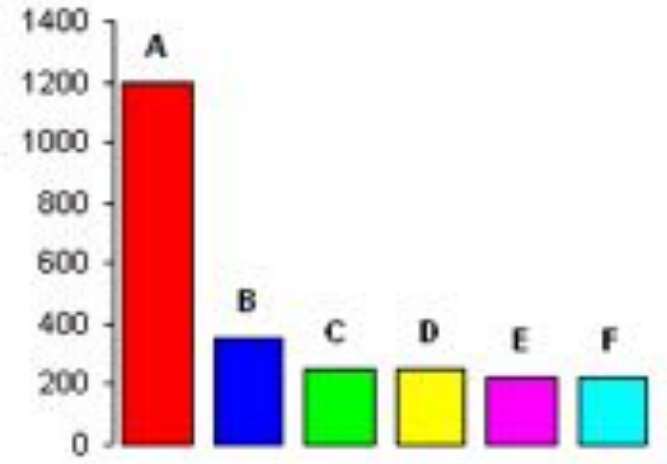
the only thing worse than a pie chart is several of them-Edward Tufte

However, Pie chart is excusable when.....

- Not many possible classes in one chart
- When approximate values are good enough
- When we want to emphasize part-to-whole comparison but not absolute value



vs



Vis #30

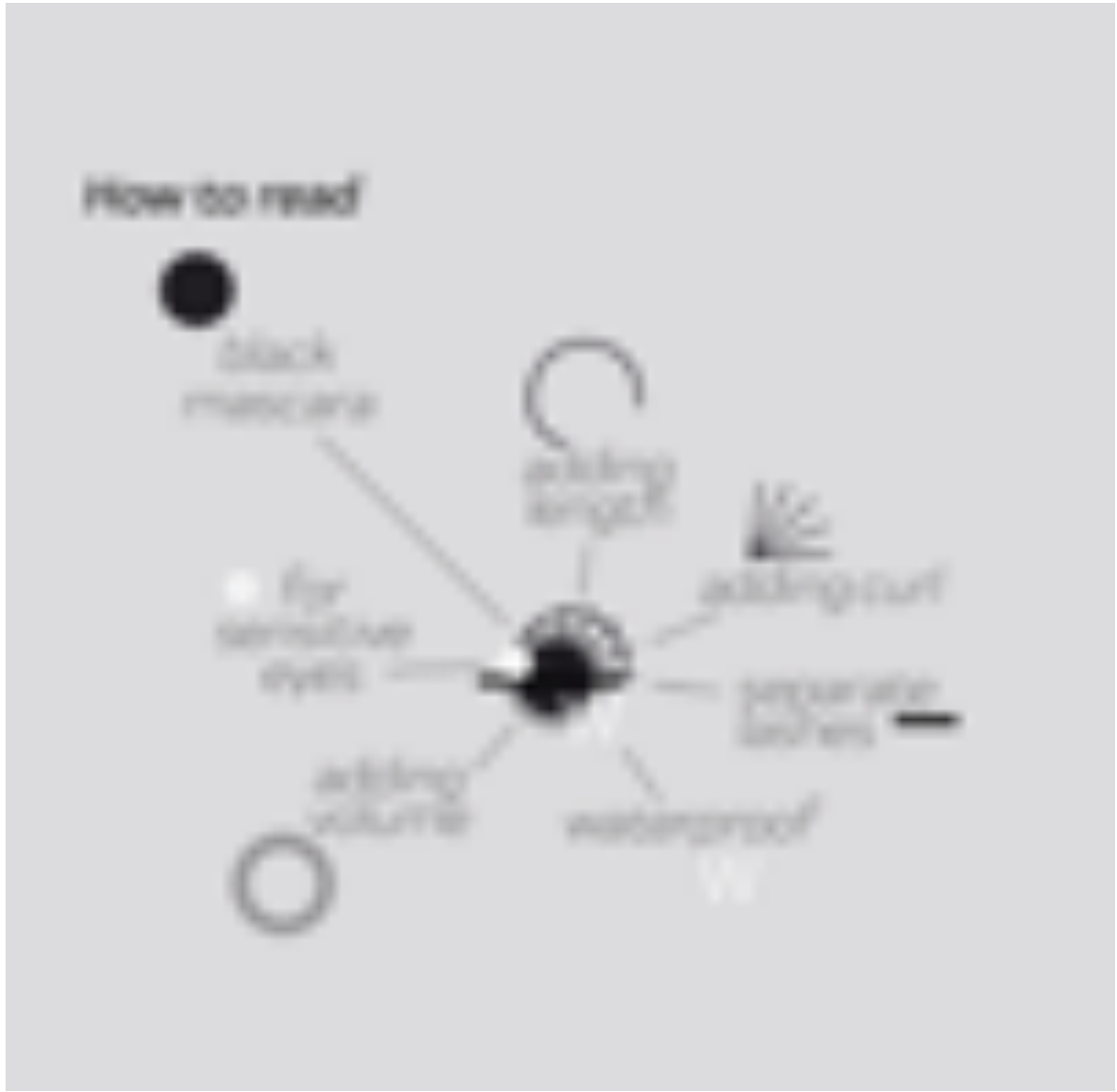
https://www.youtube.com/watch?v=zcV_FK-Yriw

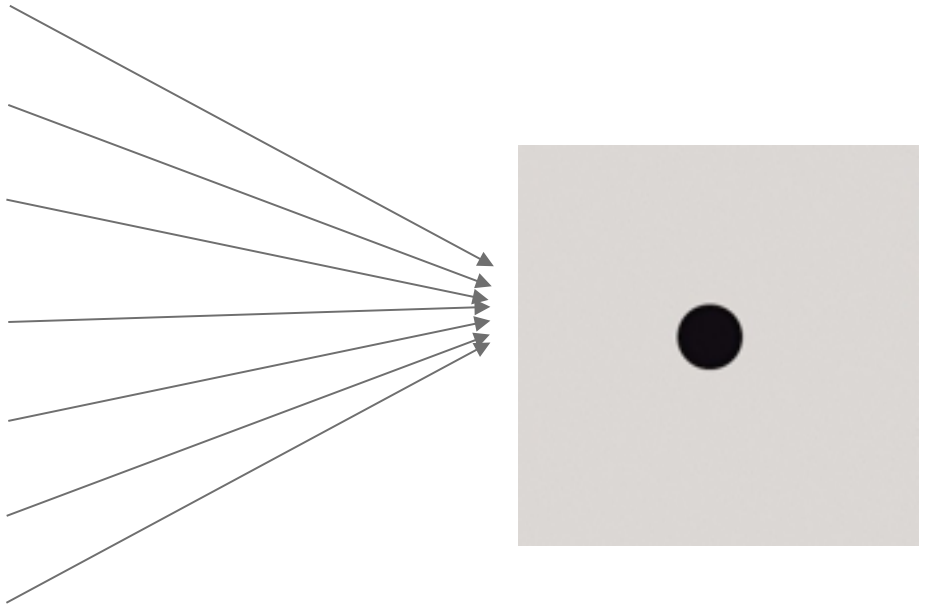
VISUALIZATION FOR MASCARAS

MSBD 5006

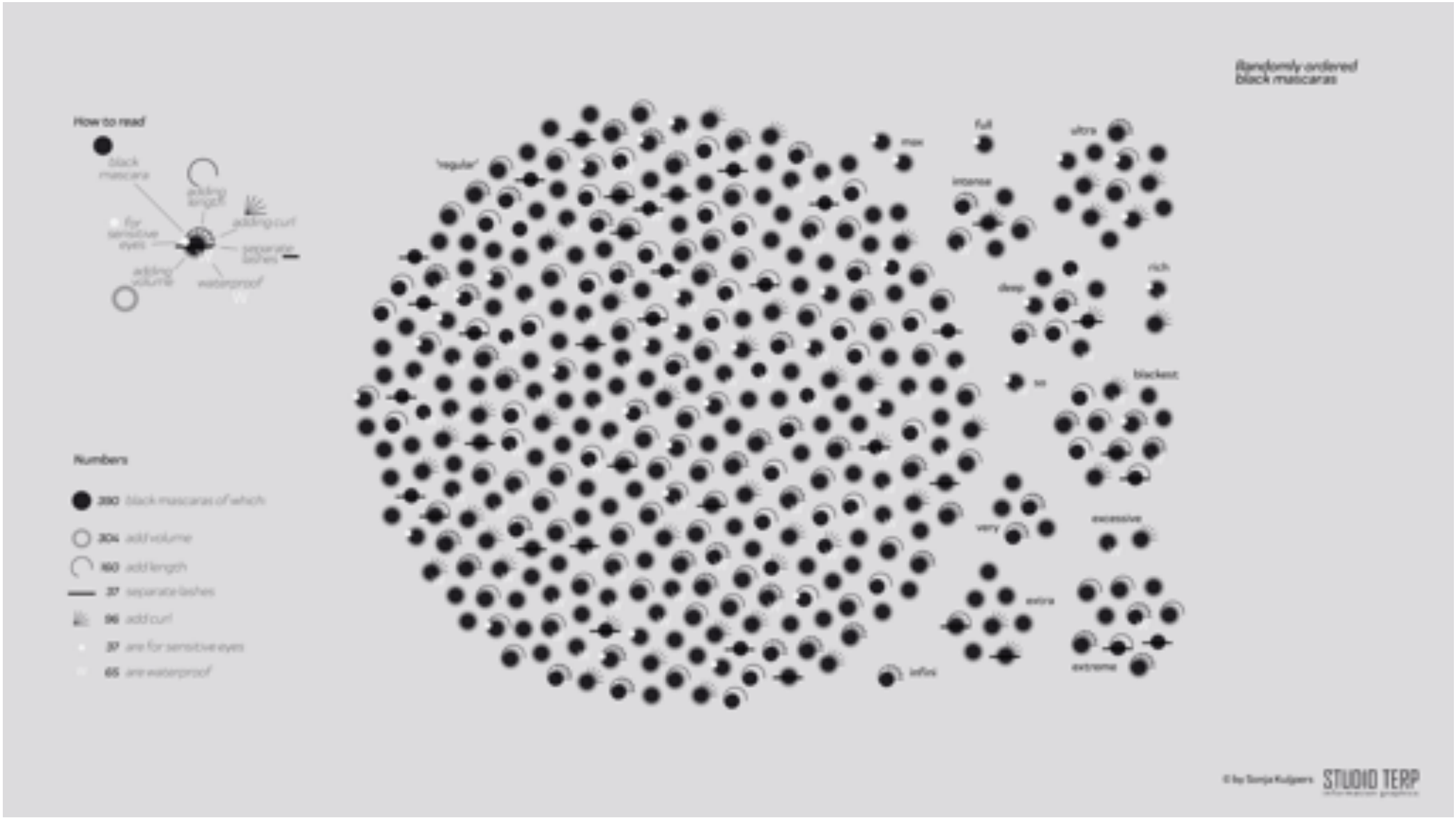
LEI QINYI

Picture source : https://enterprisersuite.com/wearing-mascara-every-day-can-be-harmful-to-eyes-c

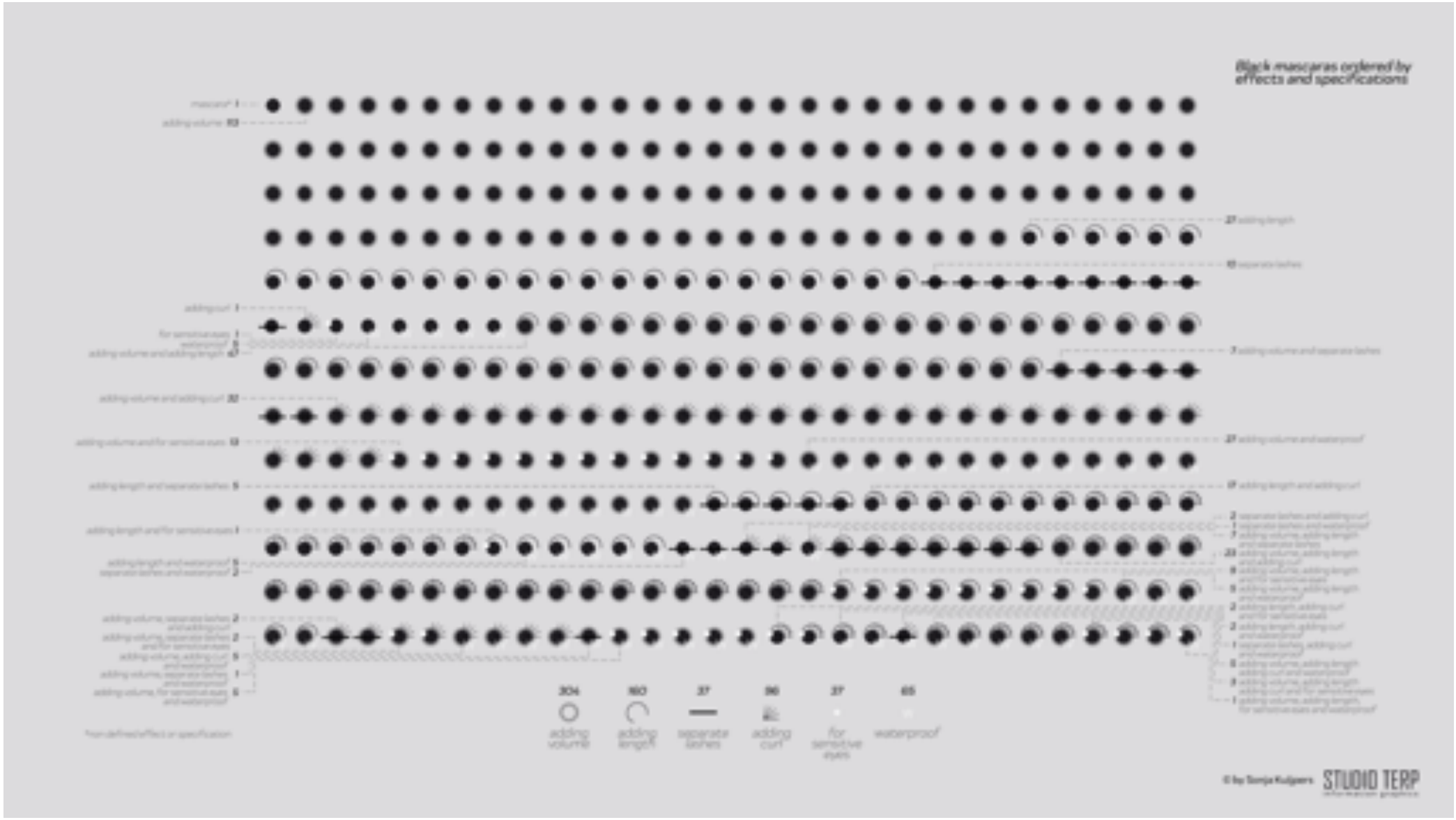




Source : http://www.studioterp.nl/mascaras-a-datavisualization/



Source : http://www.studioterp.nl/mascaras-a-datavisualization/



Source : http://www.studioterp.nl/mascaras-a-datavisualization/

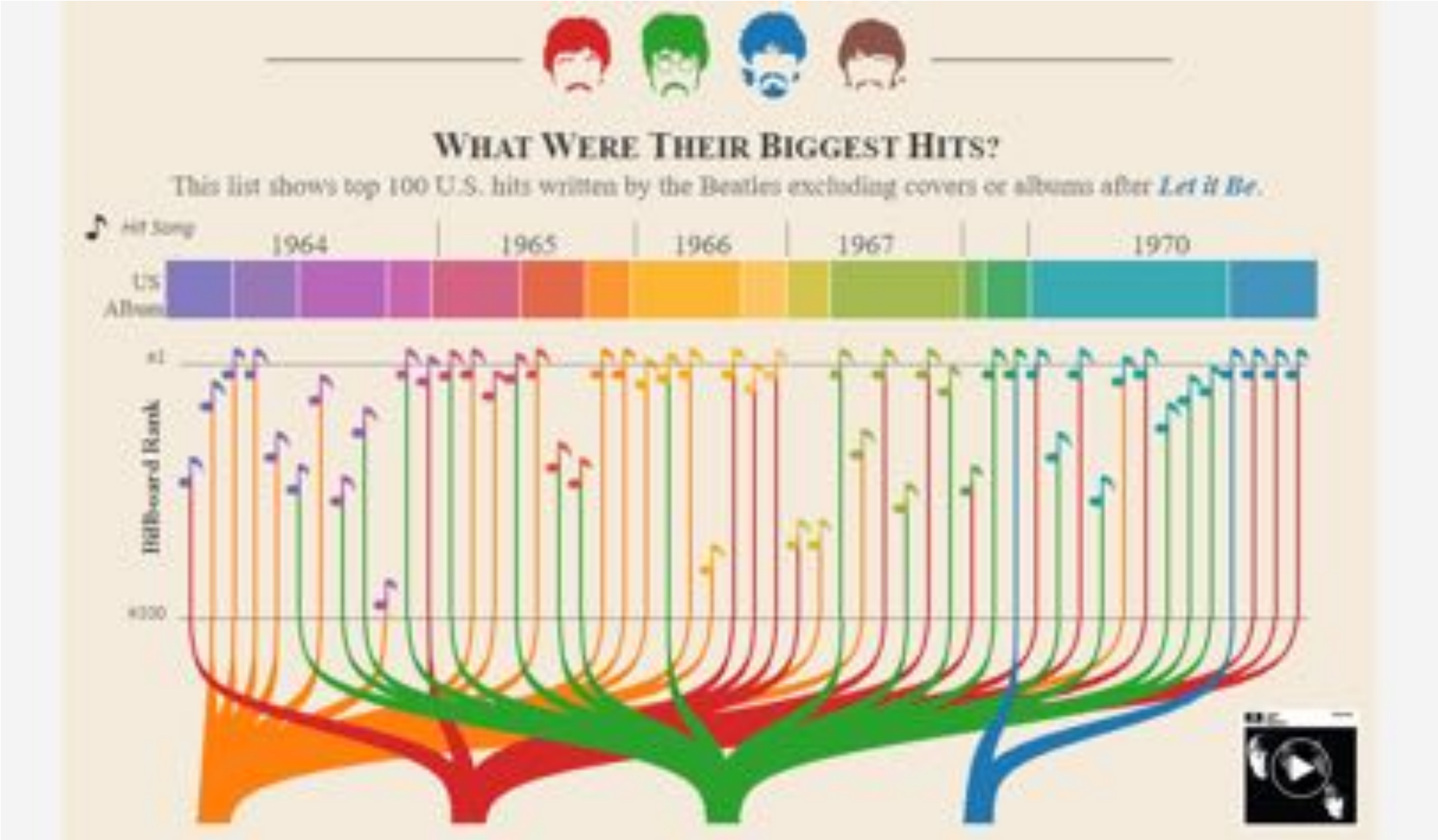
Source : http://www.studioterp.nl/mascaras-a-datavisualization/

Vis #31

https://www.youtube.com/watch?v=YSTod1FdNSI

Top Vis
Analysis of the Beatles

Leung Wai Han



https://public.tableau.com/en-us/gallery/beatles-analysis?tab=featured&topic=greatest-hits

Vis #32

https://youtu.be/42GmfYLp7sU

WIND AND WORDS

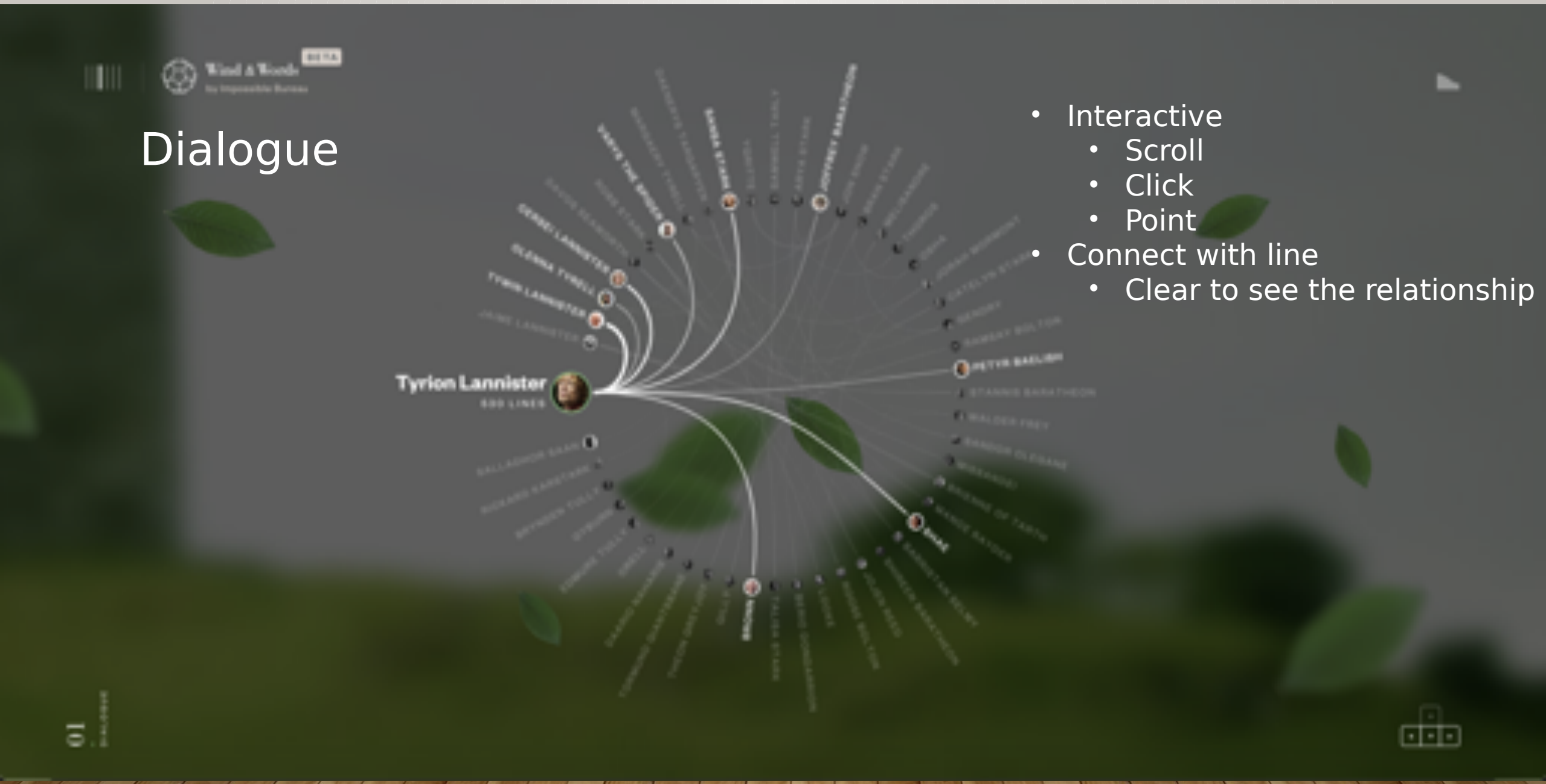
-DIALOGUE VISUALIZATION OF GAME OF THRONES.

LI,
Jinjie

INTRODUCTION

- ‘Wind and Words’ is a data visualization of dialogue analysis of every episode of Game of Thrones. It turns every spoken line from all six seasons of the show into a unique interactive website that allows people to explore the characters and the words they speak, their sentiment, and how they interact with others.
- http://beta.wind-and-words.com/

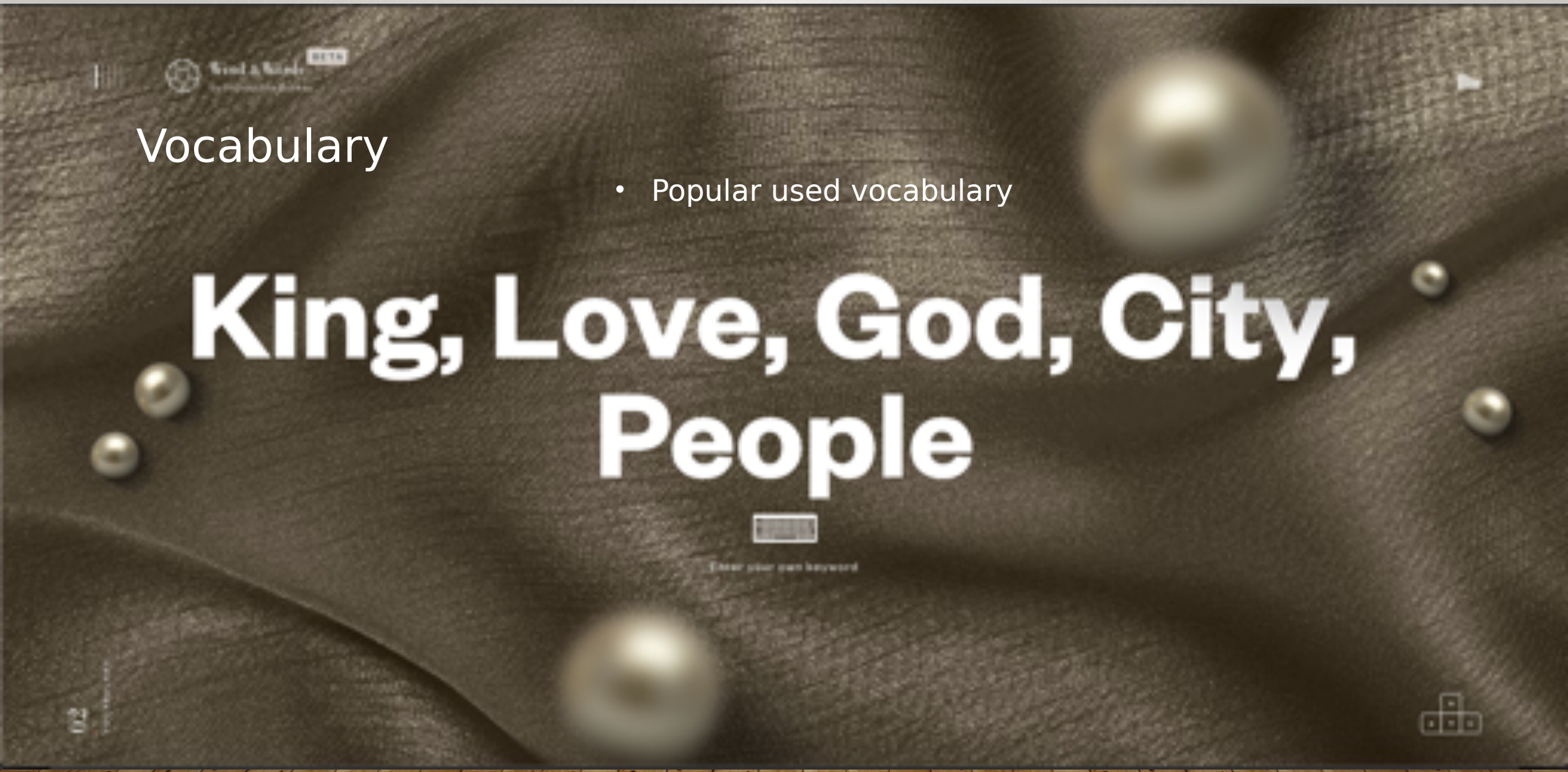
Dialogue



- Interactive
  - Scroll
  - Click
  - Point
- Connect with line
  - Clear to see the relationship

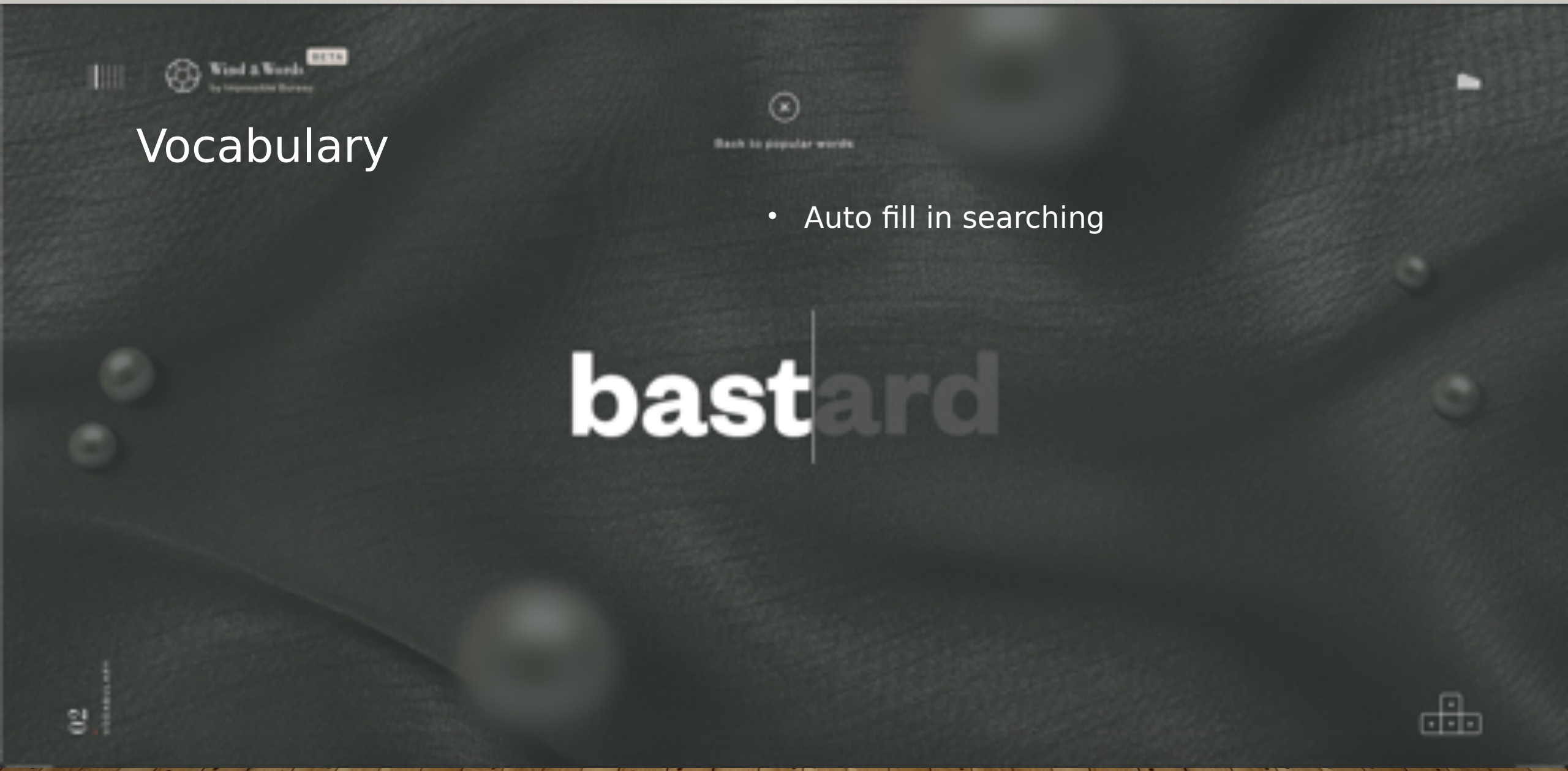
Vocabulary

- Popular used vocabulary



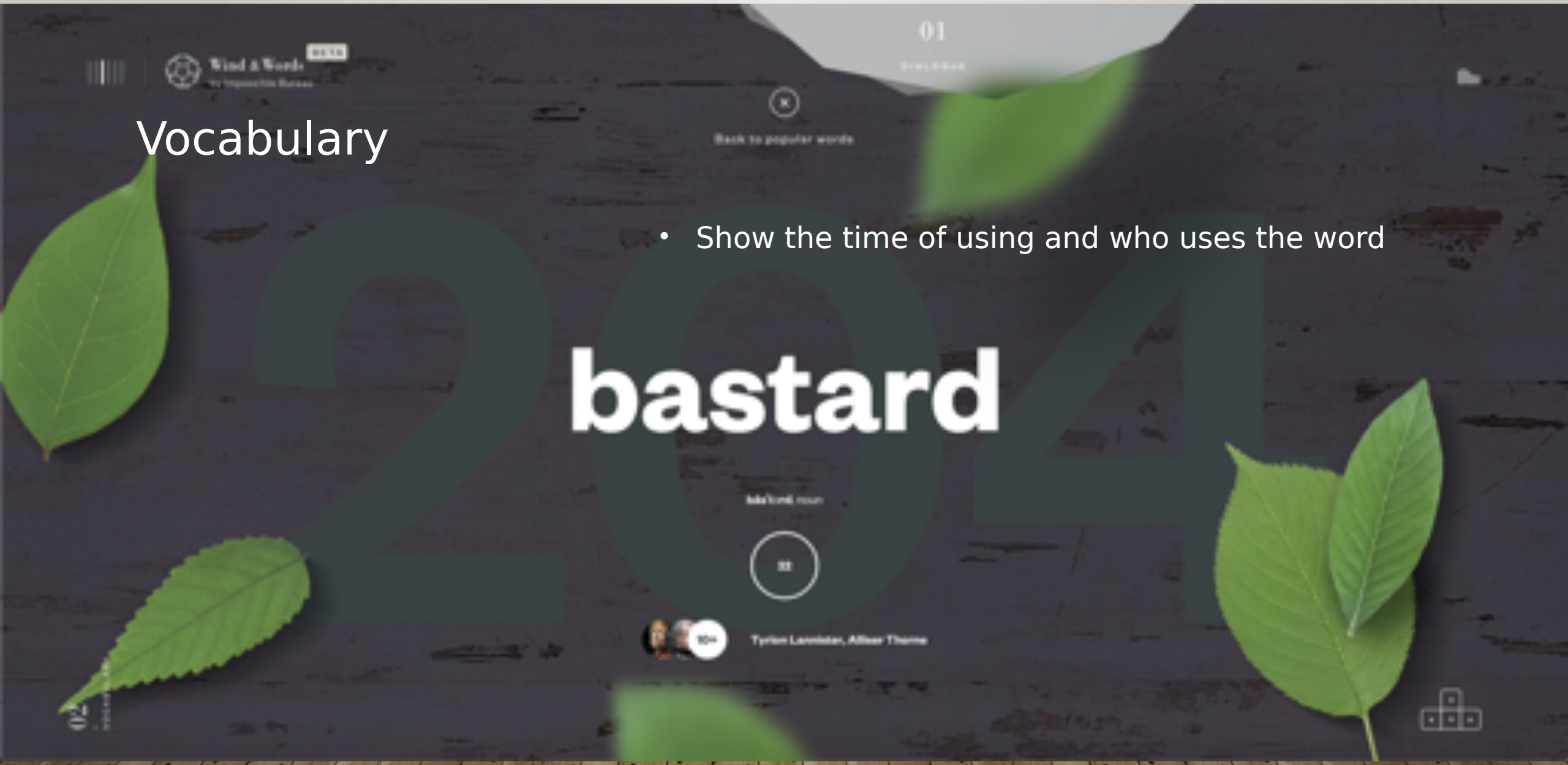
Vocabulary

- Auto fill in searching



Vocabulary

- Show the time of using and who uses the word

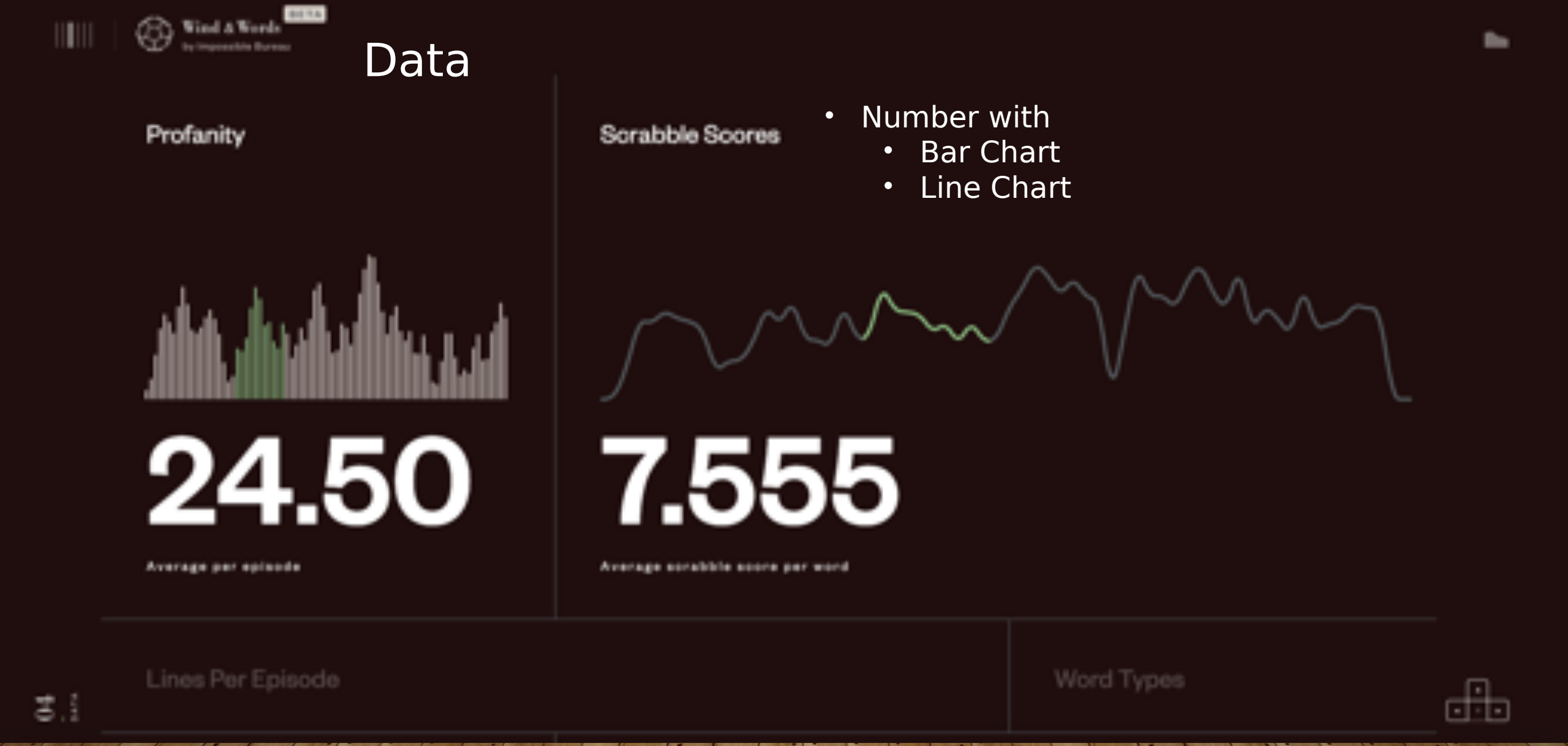


Sentiment

- Circle denotes the amount of dialogue

Data

- Number with
  - Bar Chart
  - Line Chart



THANKS FOR WATCHING!

Vis #33

Top Vis Competition

David Ling

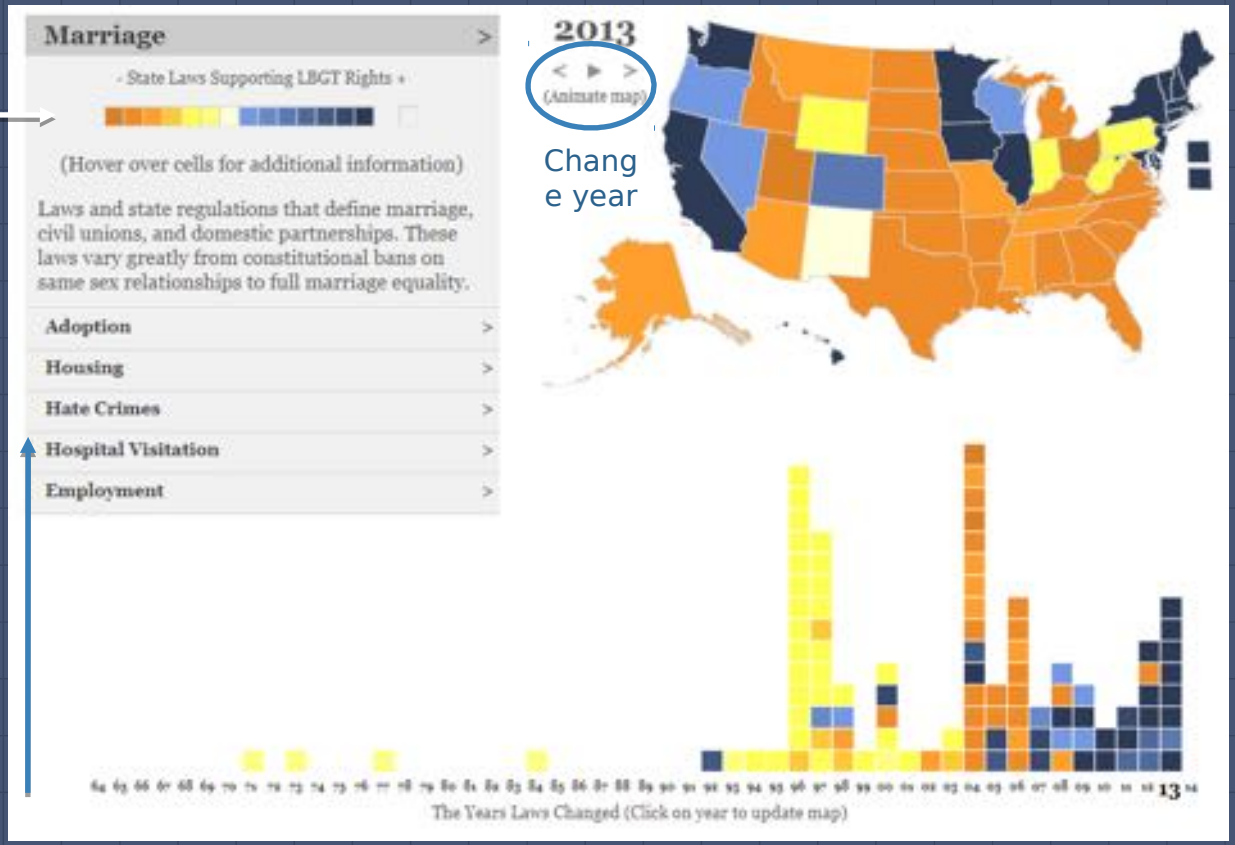
50 Years of Change – LGBT civil rights in U.S.

An U.S. map based visualization

- Overview of how supportive the state law is to LGBT rights over time
- Each state will be encoded in a color representing the supportiveness
- Below the map, there is a stacked bar chart which shows the number of states which pass LGBT-related laws in a specific year

Demonstration

Color encoding



Number of states with LGBT related law

Vis #34

https://youtu.be/7Tm8B2mHRec

Travel Visa Inequality

20633102 LIU Ran

Introduction

- What is travel visa inequality?
- For example, if residents of country A do not need a visa to country B, and residents of country B need a visa to country A, this is the inequality of travel visa.

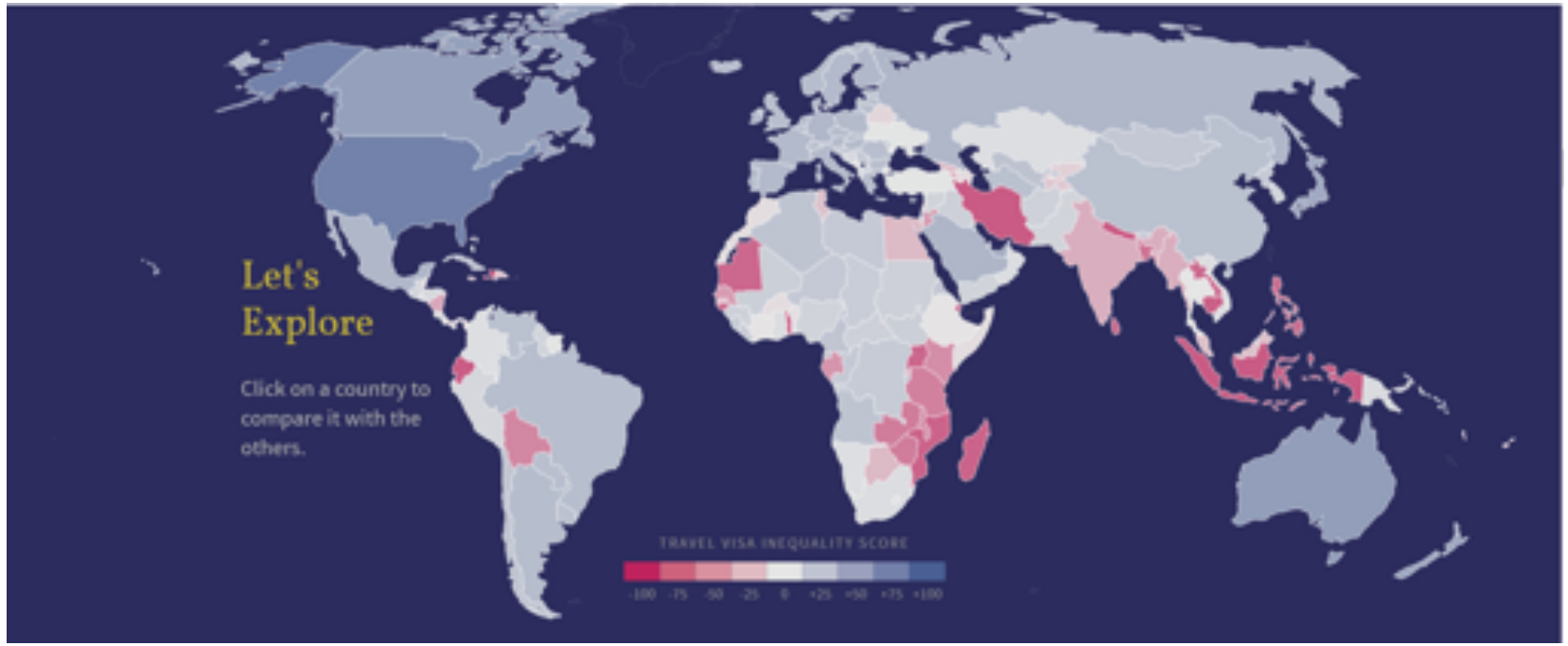
- Author
- Christian Laesser (German)

- Date
- Category: Visa requirements by nationality and linked Wikipedia articles. Scraped on October 19, 2017.

Encoding Scheme

- **Map**
  Use world map to intuitive display the situation in each country

- **Color**
  Blue - advantage
  Red - disadvantage

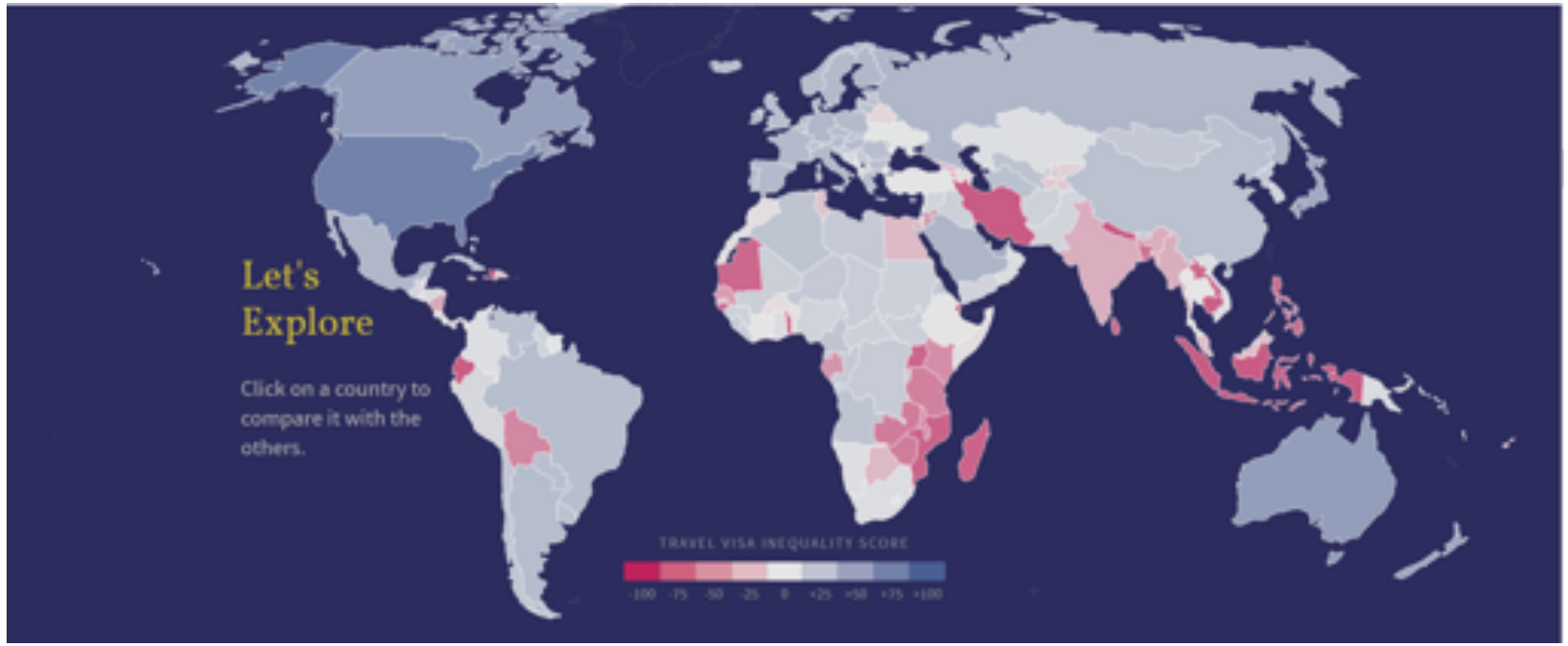


Message it conveys

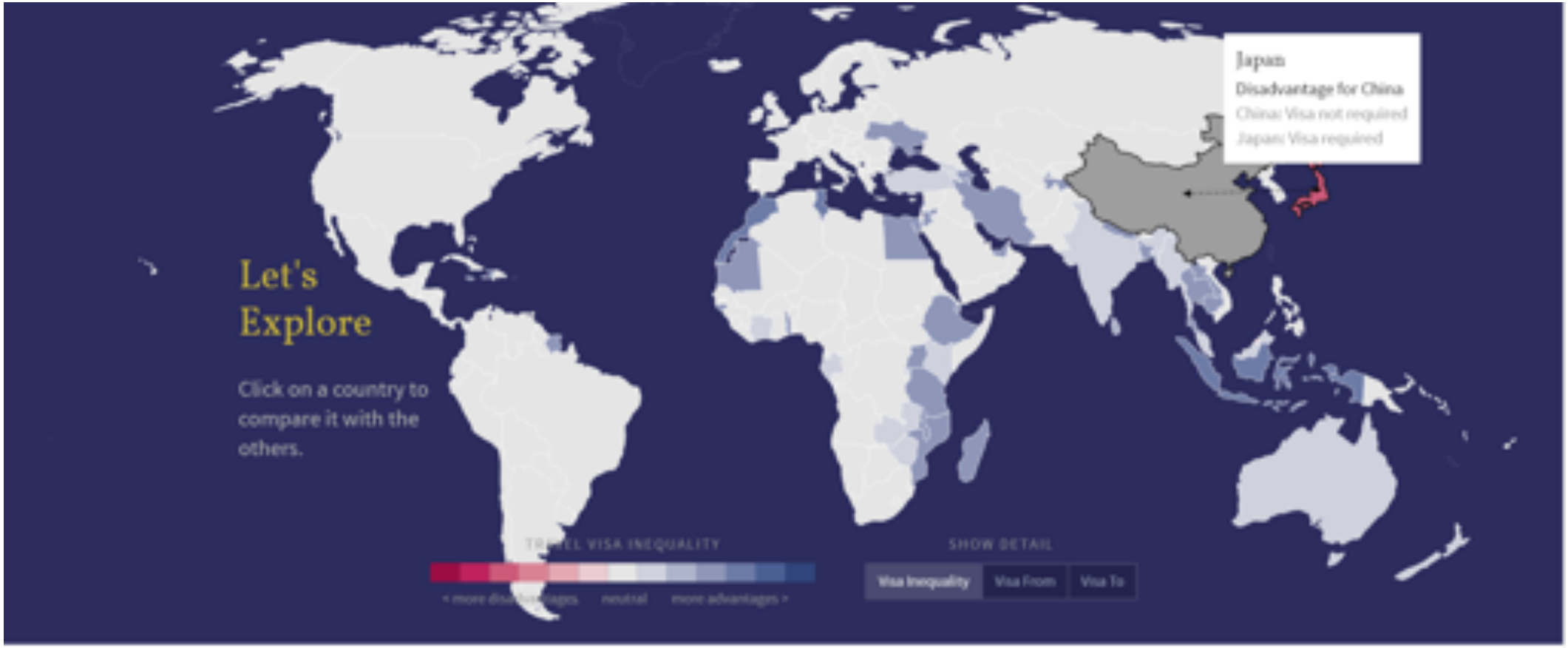
- High inequality score
  North America
  Oceania

- Middle inequality score
  Europe
  Part of Asia

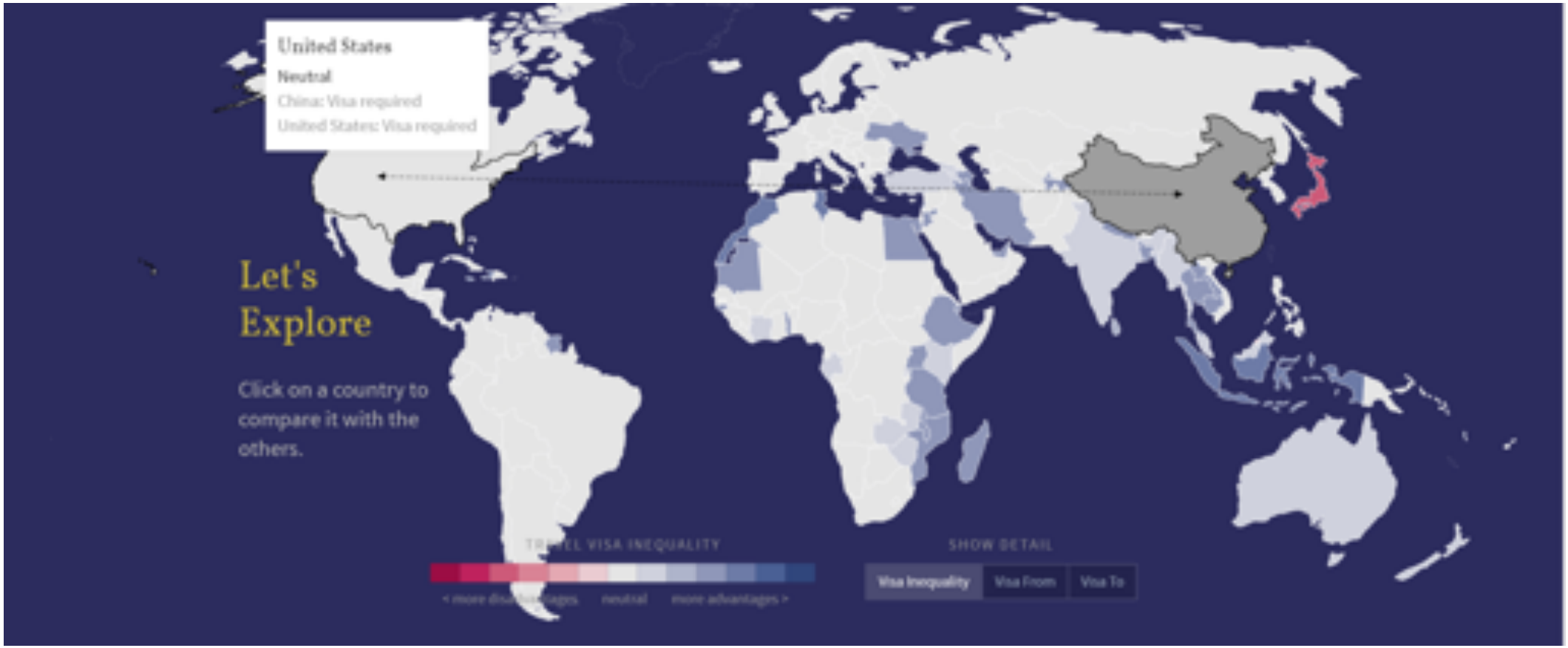
- Low inequality score
  Southeast Asia
  East Africa



Travel Visa Inequality------China VS Japan



Travel Visa Inequality------China VS United States



Advantages

- **Beautiful**
  The author used a harmonious color scheme to encode the data and created this eye-catching masterpiece.

- **Intuitive**
  With a glance, we can immediately understand the distribution of travel visa inequalities in the world.

- **Interactive**
  By clicking on a specific country, we can understand the relative merits of this country and other countries on travel visa inequality.

Thanks for listening
Please vote for me

Vis #35

https://youtu.be/gT2YyPBk8c0

THE MISSING MIGRANTS MAP

MSBD 5005 Top Visualization Competition

LIU Xuantong 20637093

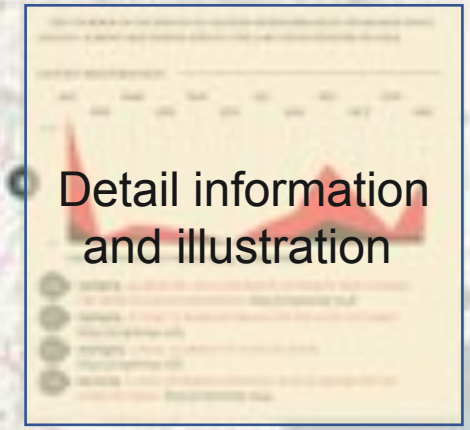
Source : https://www.behance.net/gallery/34680727/THE-MISSING-MIGRANTS-MAP-Corriere-della-Sera

OVERVIEW

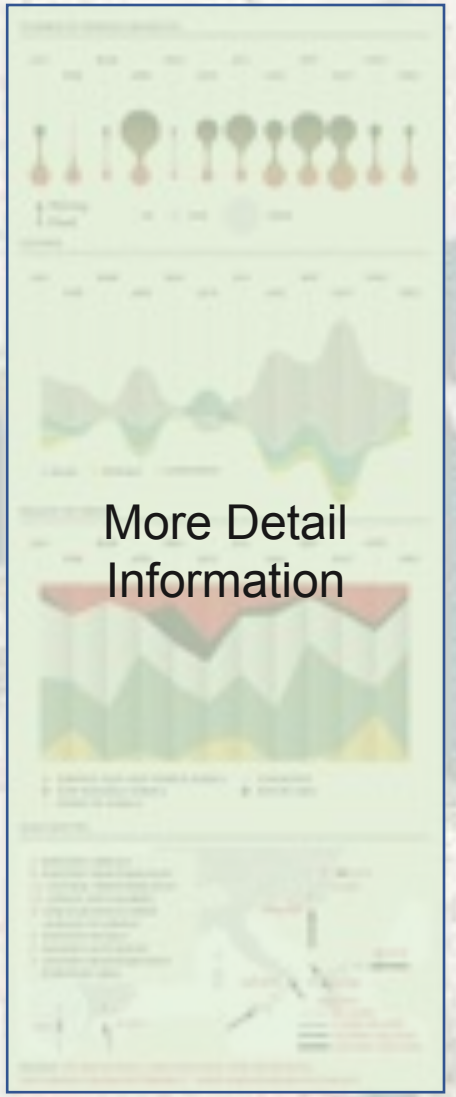
Background and Encoding

Detail information and illustration

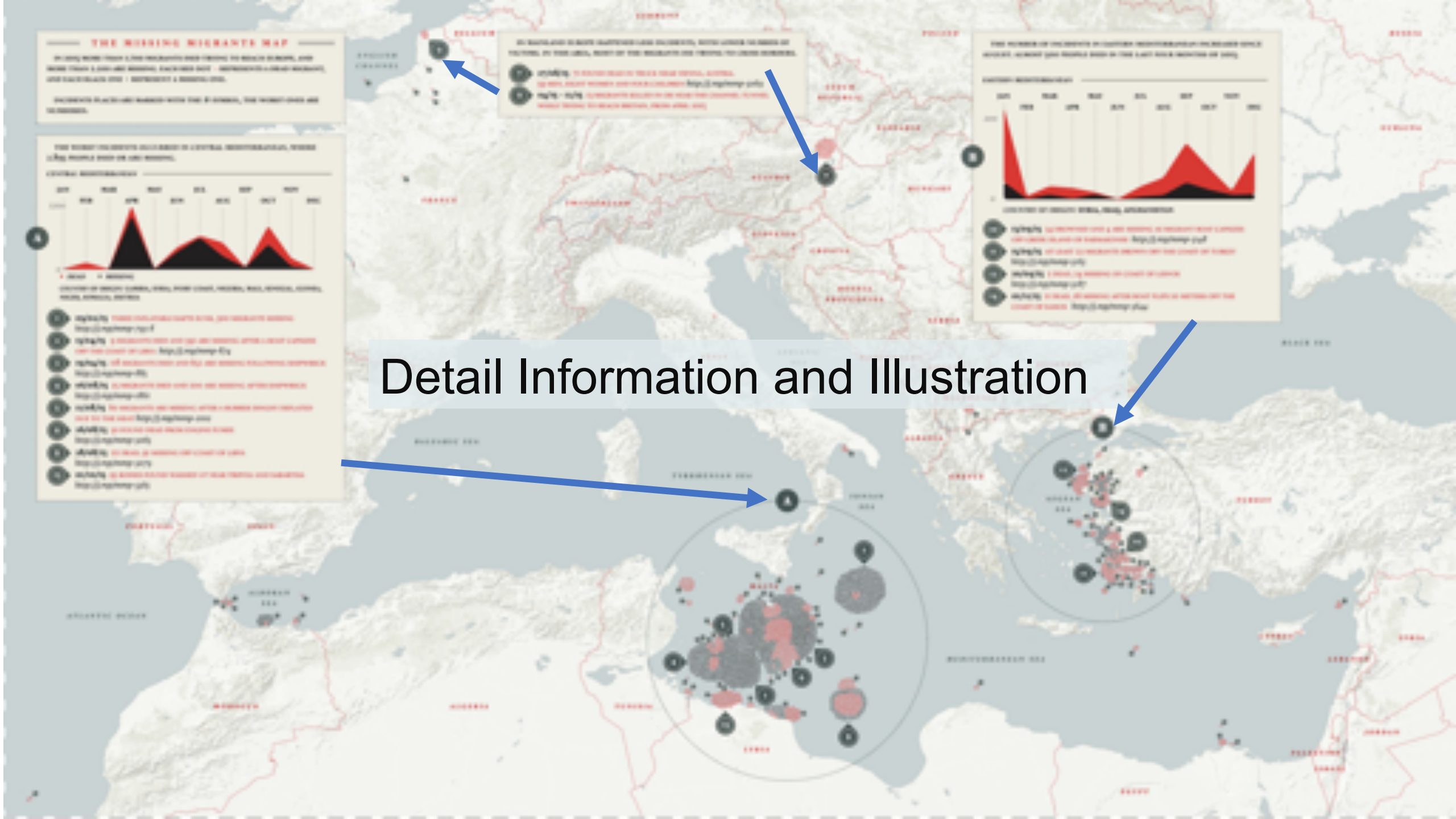
Detail information and illustration



Detail information and illustration

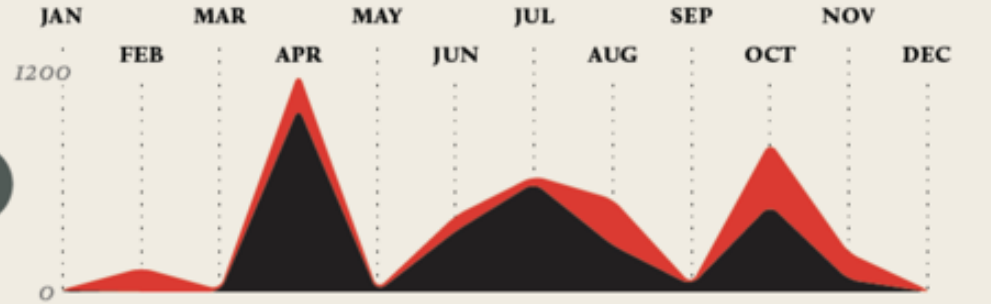


More Detail Information


THE MISSING MIGRANTS MAP
Detail Information and Illustration

THE WORST INCIDENTS OCCURRED IN CENTRAL MEDITERRANEAN, WHERE 2.895 PEOPLE DIED OR ARE MISSING.

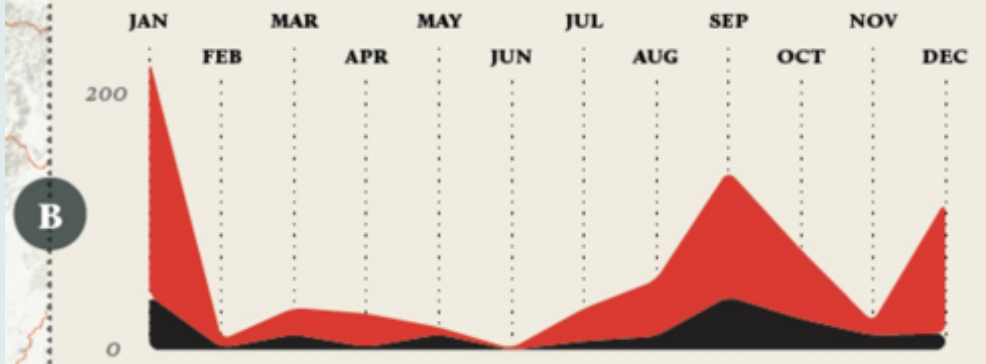
CENTRAL MEDITERRANEAN



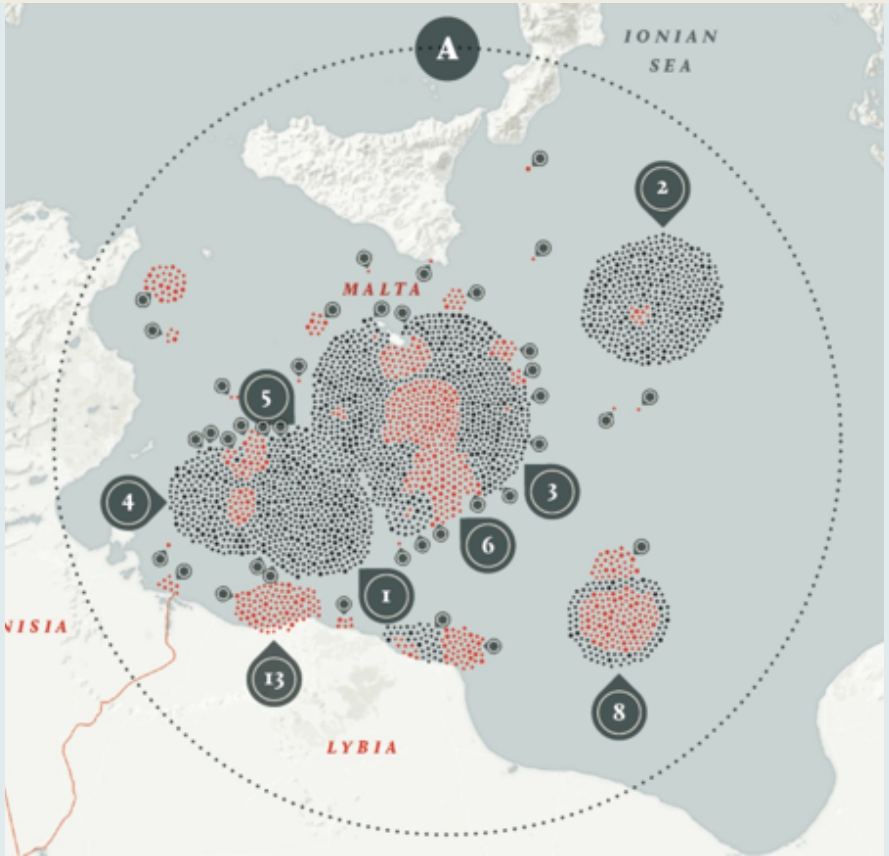
COUNTRY OF ORIGIN: GAMBIA, SYRIA, IVORY COAST, NIGERIA, MALI, SENEGAL, GUINEA, NIGER, SOMALIA, ERITREA

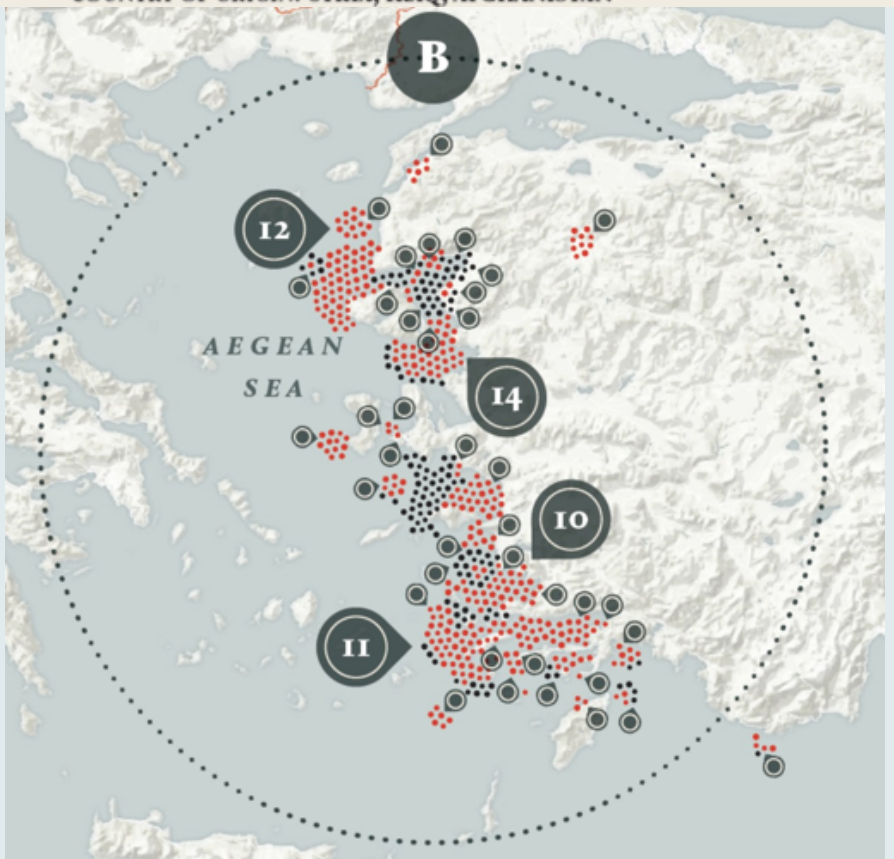
THE NUMBER OF INCIDENTS IN EASTERN MEDITERRANEAN INCREASED SINCE AUGUST. ALMOST 500 PEOPLE DIED IN THE LAST FOUR MONTHS OF 2015.

EASTERN MEDITERRANEAN

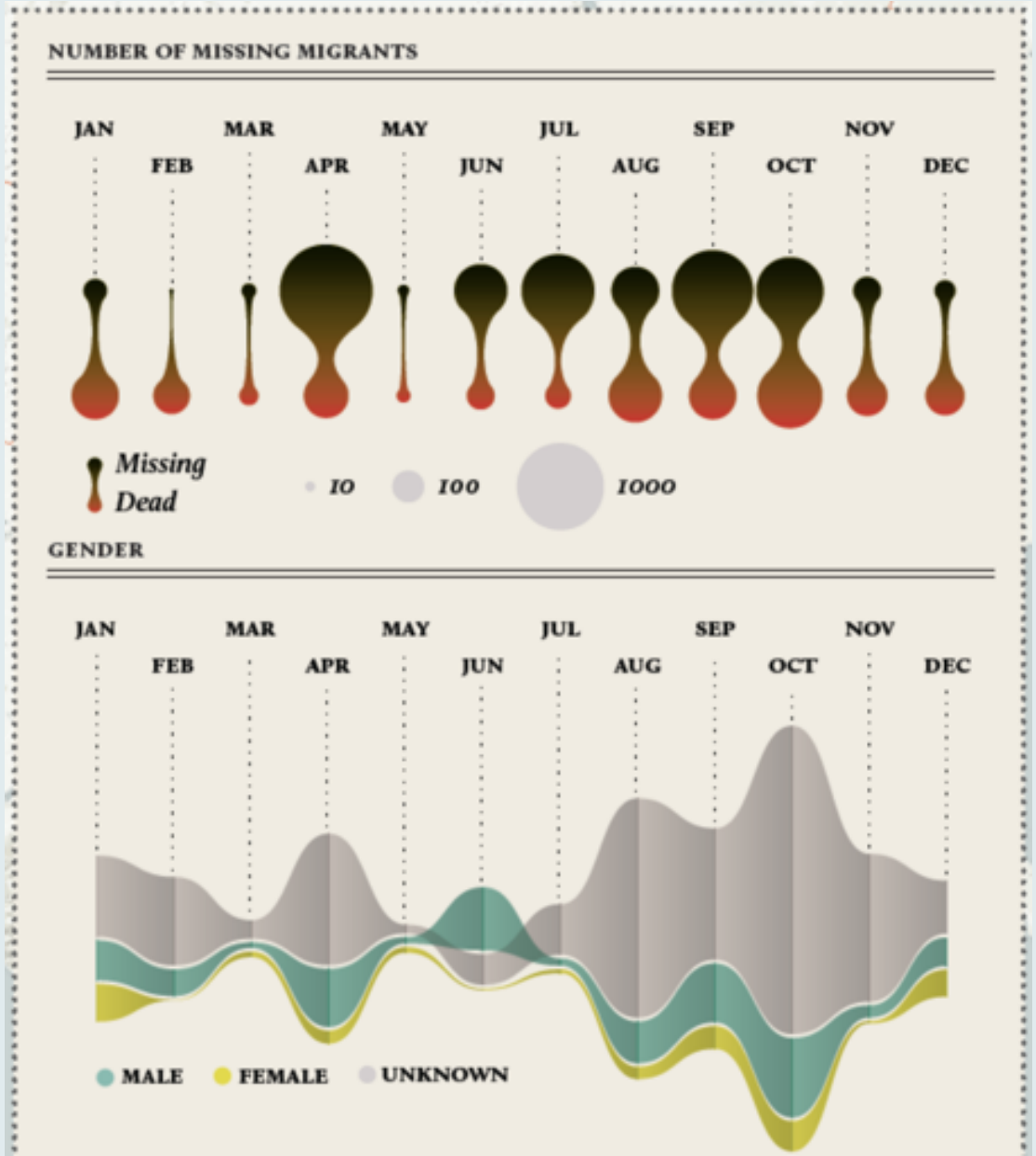


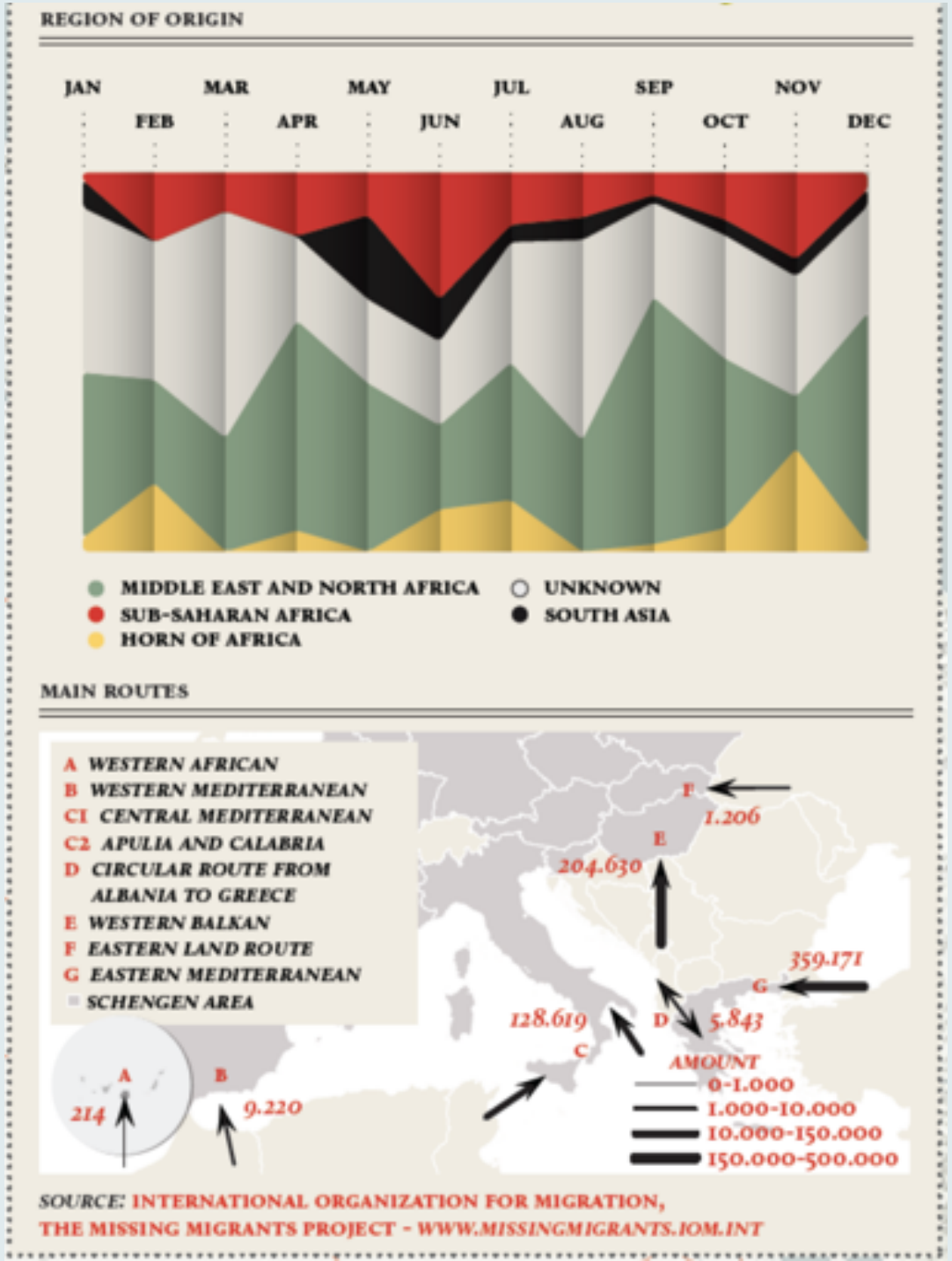
COUNTRY OF ORIGIN: SYRIA, IRAQ, AFGHANISTAN





More Detail Information



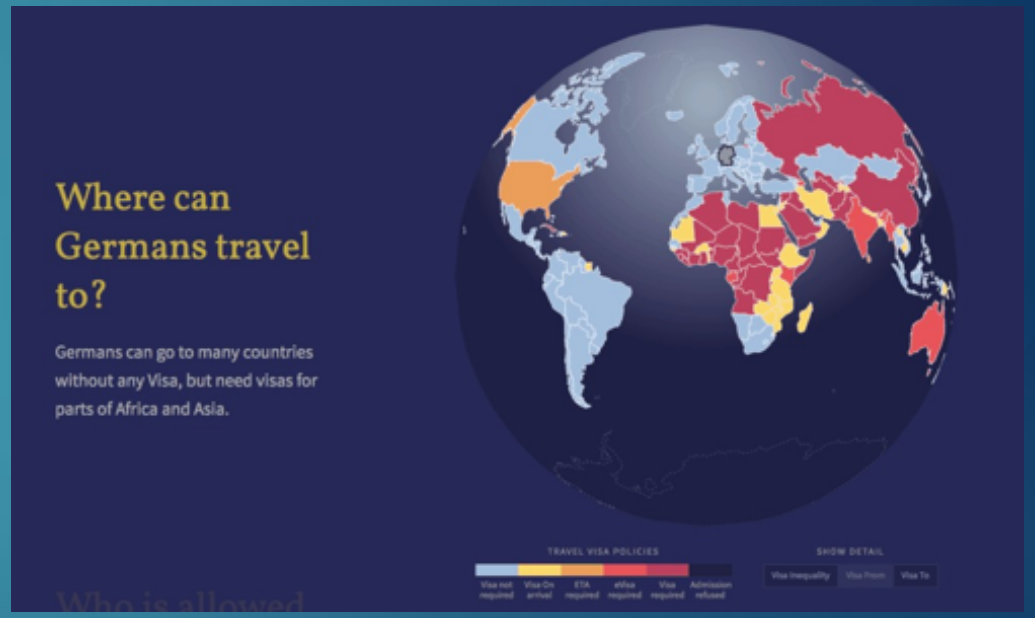


THANK YOU!
MSBD 5005 Top Visualization Competition
LIU Xuantong 20637093

Vis #36

https://youtu.be/AnKOR0PiOfE

Travel Visa Inequality



TOP VIS COMPETITION

NAME ： LIU YUNWEN

Target of this visualization

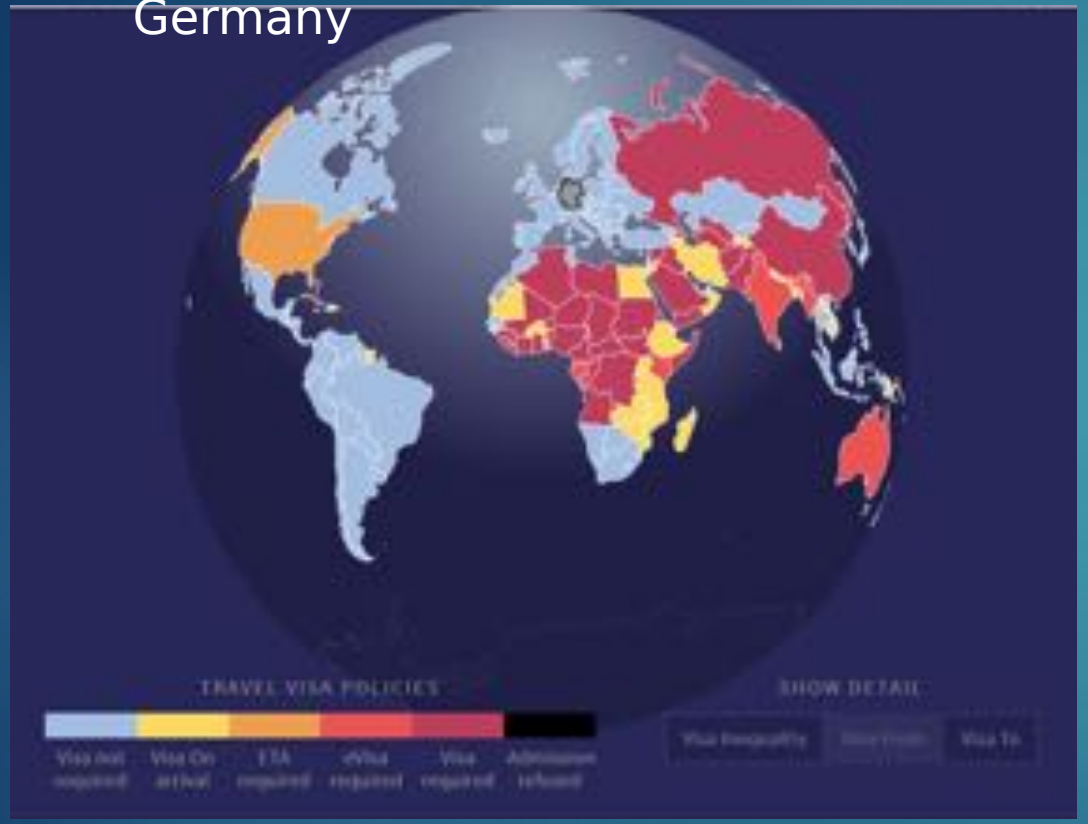
The visualization aims to show the difference between visa travel policies of 194 countries. The inequality gets calculated by comparing the travel policy of ‘Visa From A’ and ‘Visa To A ’.

- Visa From A (Visa policies for a citizen from A going abroad)
- Visa To A (Visa policies for a foreigner entering A)
- Travel Visa Inequality Score (‘Visa From’ -‘Visa To’)

Visa from and to Germany

Germany → Other countries

Germany



Other countries →

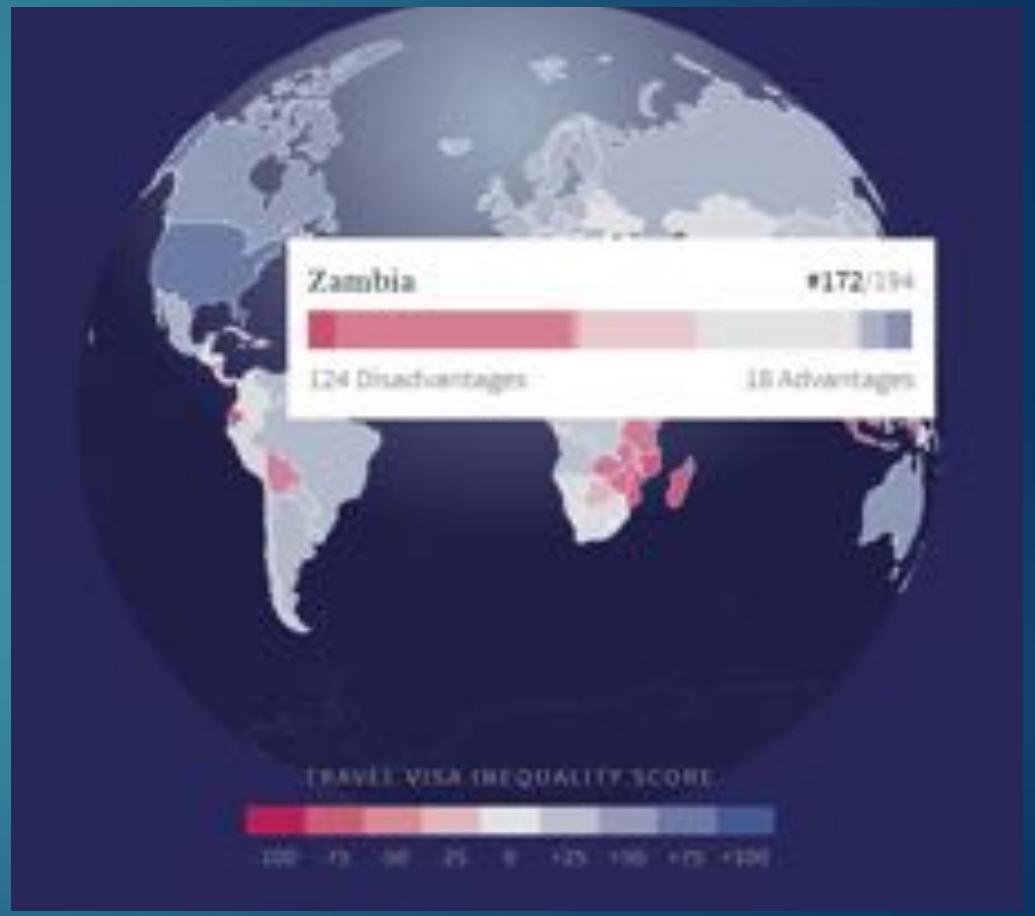
Attribute type: Categorical Encoding scheme: Color hue

Travel Visa Inequality

Encoding scheme:

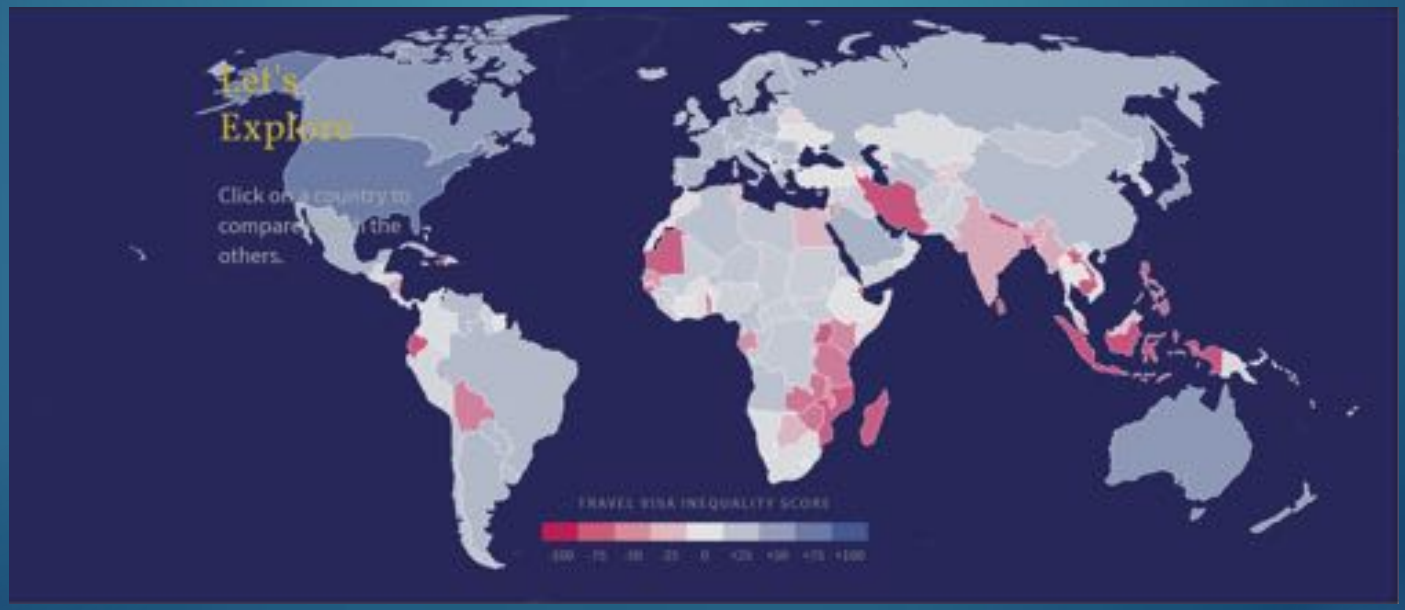
- Diverging color scheme (Disadvantages/Advantages)
- Color saturation (the absolute value of the score)

Travel Visa Inequality



Why impressive?

- Map visualization （Intuitive ， efficient and eye-catching)
- Harmonious color scheme
- Meaningful target: To raise awareness for existing inequalities between different countries.

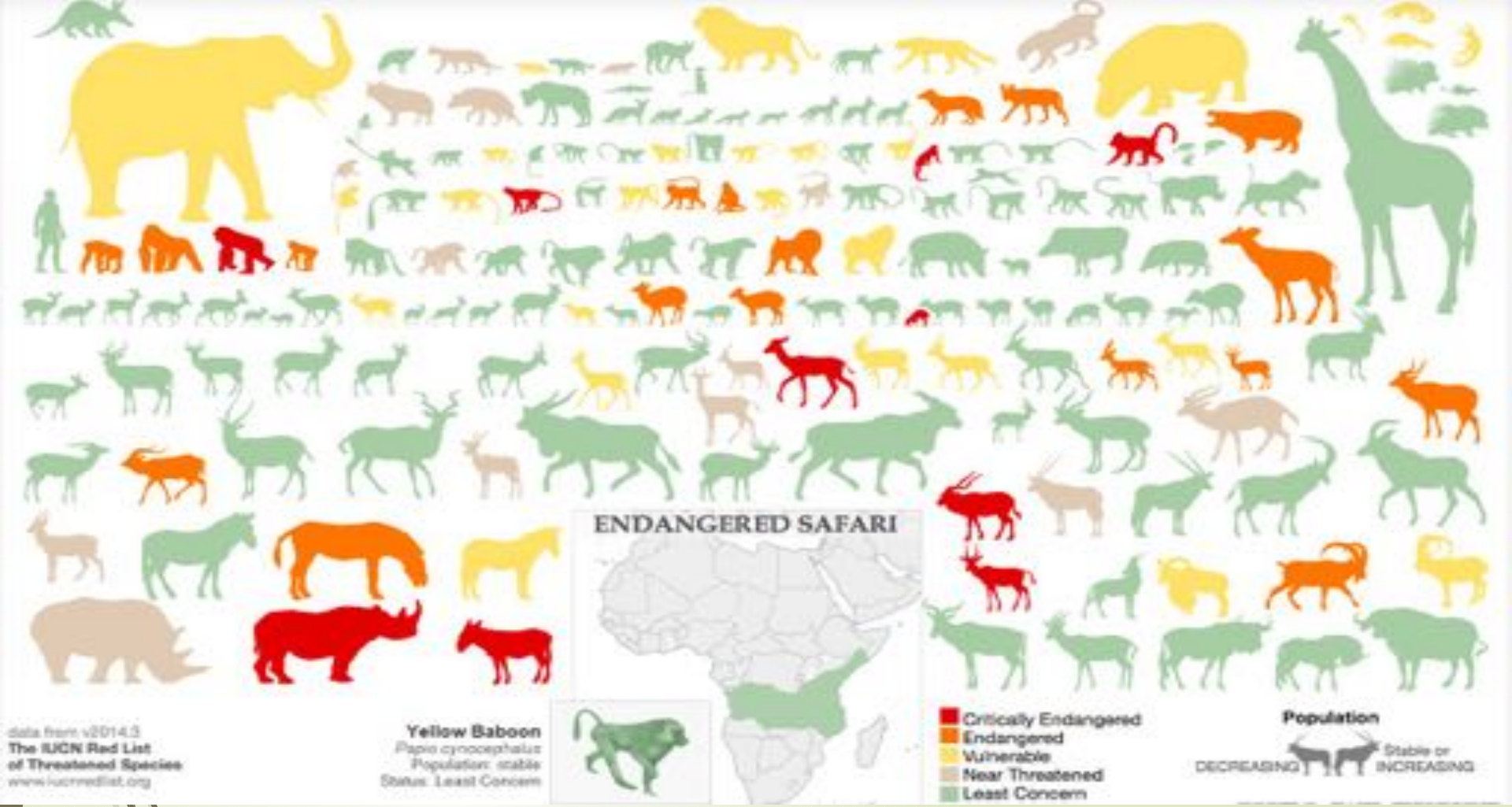


Thank You For Watching!

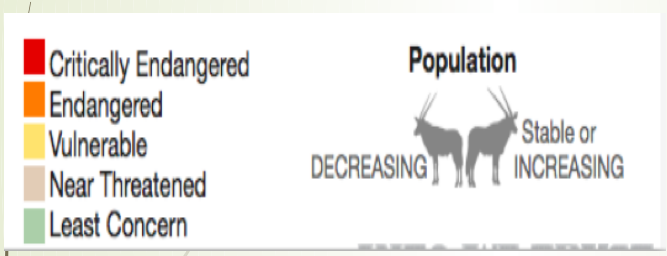
Vis #37

Animal Visualization

Yigao Li
20660765



https://medium.com/@giamg415/data-vis-example-1-of-my-beat-48b0c42ecbe5



- The explaination of animals’ color
- The direction of head incidates the population

- The area of this animal’s distribution and its detail

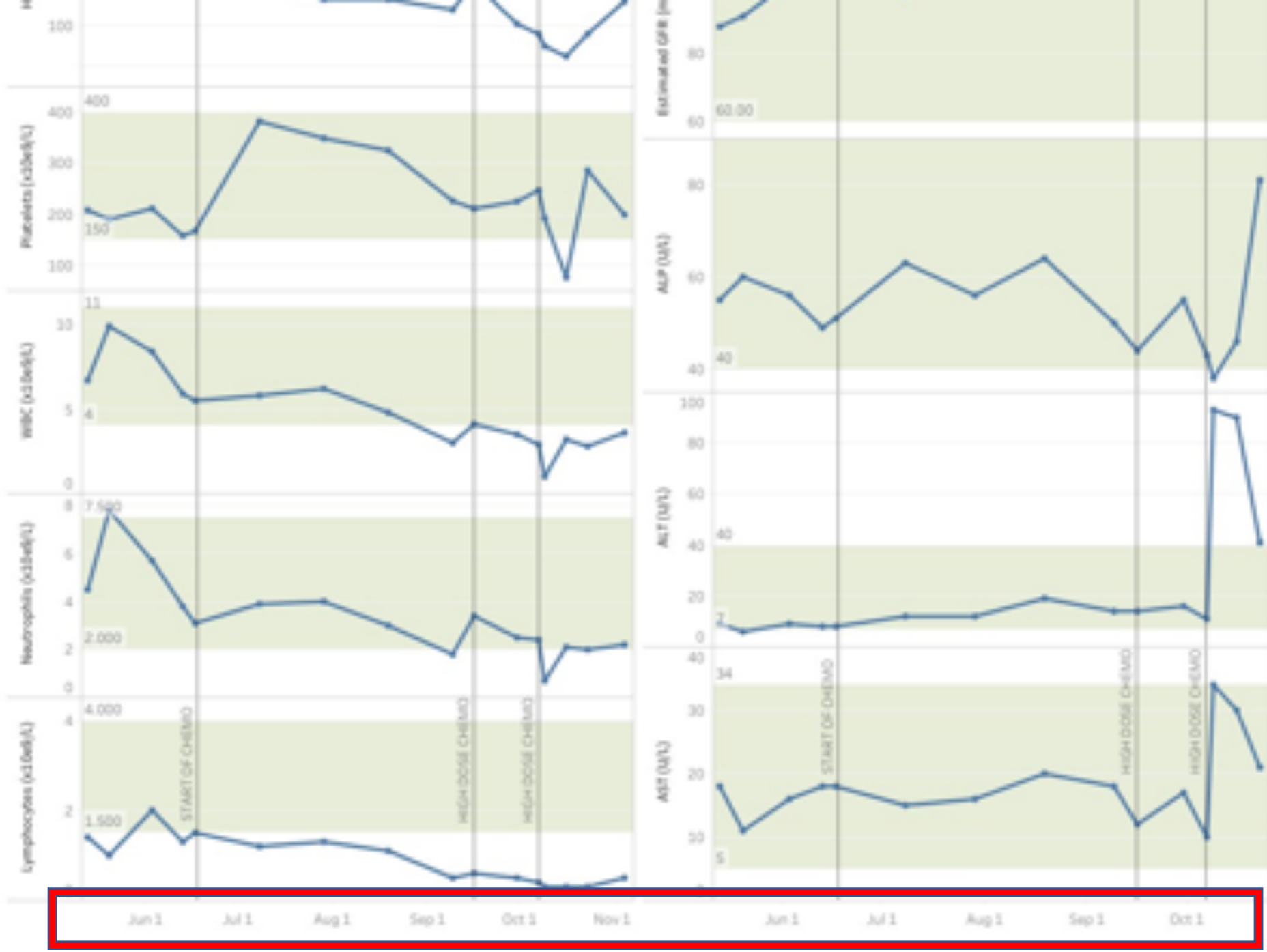
Thank you

Vis #38

https://www.youtube.com/watch?v=QLdQd1OBUbI

Li Yuan

A Patient's Treatment Record


Platelets (x10e9/L)
400
300
200
150
100
WBC (x10e9/L)
11
10
5
4
0
Neutrophils (x10e9/L)
8
6
4
2
7.500
2.000
0
Lymphocytes (x10e9/L)
4
2
4.000
1.500
ALP (U/L)
80
60
40
ALT (U/L)
100
80
60
40
40
20
0
7
AST (U/L)
40
30
20
10
34
5
START OF CHEMO
HIGH DOSE CHEMO
Jun 1
Jul 1
Aug 1
Sep 1
Oct 1
Nov 1

Timeline

17 days from first GP visit to preliminary diagnosis	31 days to confirm diagnosis/staging	8 days to start chemo	123 days from starting chemo to NED

Diagnostics

ULTRASOUNDS	2
CT SCANS	3
BIOPSIES	3
MRIs	1
PET SCANS	2
X-RAYS	2

Treatment

BLOOD DRAWS	27
IVs	16
ROUNDS OF CHEMO	8
PRESCRIPTIONS FILLED	44
VISITS TO COMMUNITY CARE CLINIC	48

Complications

ER VISITS	4
GP VISITS	5
KIDNEY INFECTIONS	3

Complete Blood Count

Kidney/Liver Function

reddit u/dataisbeautiful Search r/dataisbeautiful

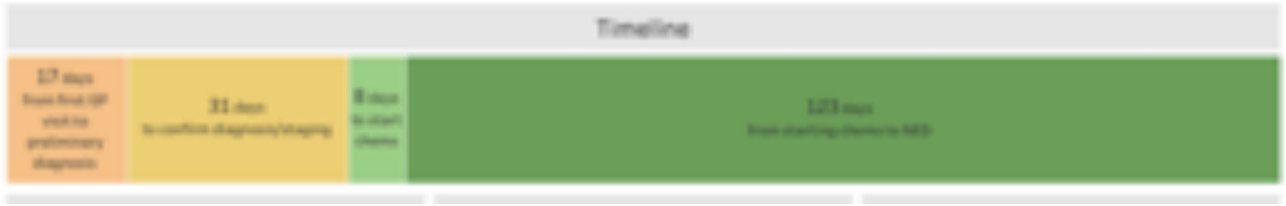
190 [OC] My last 6 months as a cancer patient OC

r/dataisbeautiful · Posted by u/shescrolls 1 day ago

190

[OC] My last 6 months as a cancer patient

OC



r/dataisbeautiful

13.9m Members 3.3k Online Feb

A place for visual representati
Graphs, charts, maps, etc. Da

shescrolls 59 points · 1 day ago

I was diagnosed with lymphoma in May of this year, and have just officially achieved remission. With the advent of online health portals I thought it might be a welcome distraction to track some of my blood work and other stats over the course of treatment.

Source: online medical records, personal experience/journals

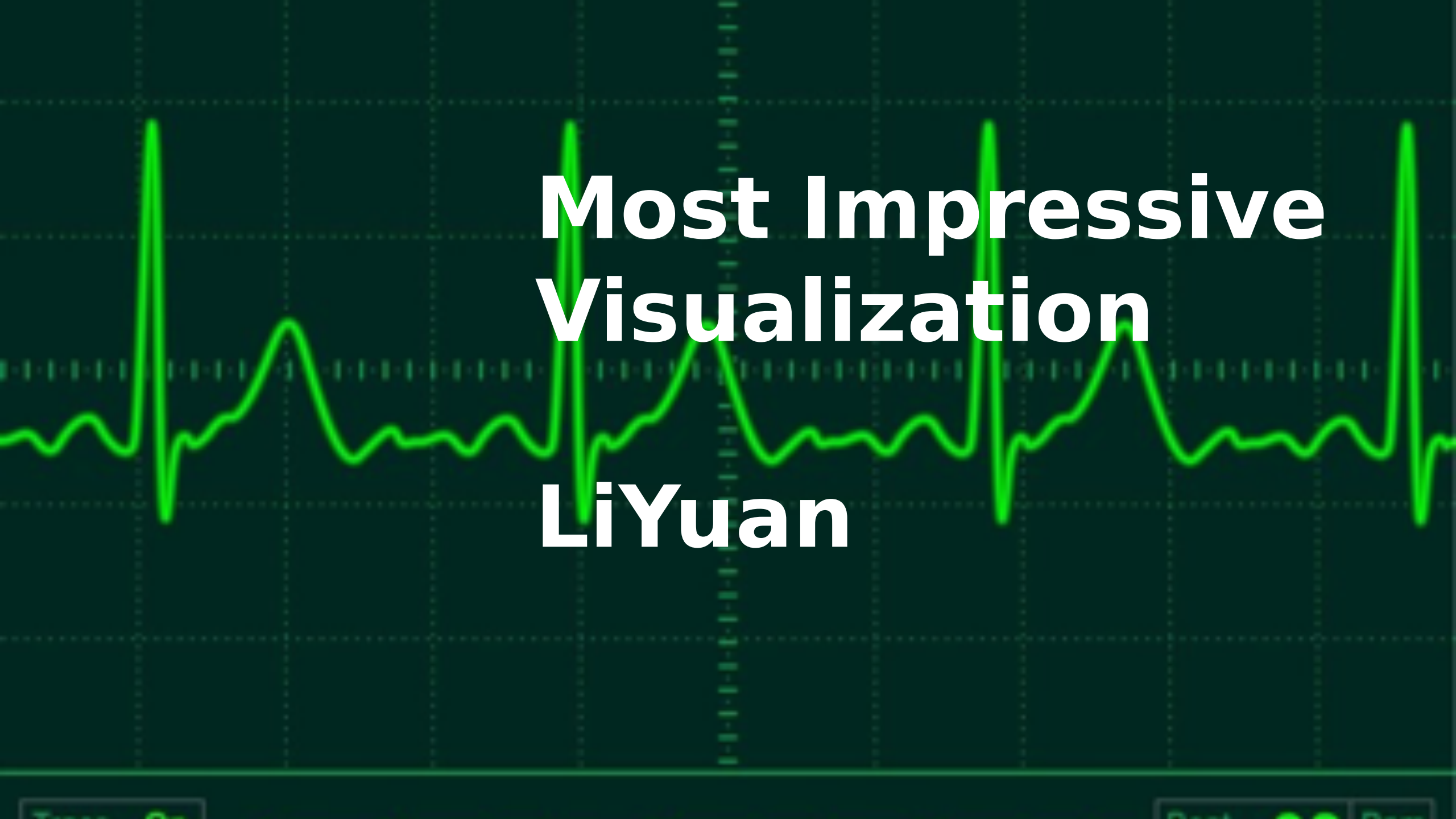
Tools: Excel, Tableau Public

Reply Give Award Share Report Save

Atlas_Brown 11 points · 1 day ago

Speedy recovery mate! Nice infographic!

https://www.reddit.com/r/dataisbeautiful/comments/ds0brk/oc_my_last_6_months_as_a_cancer_patient/


Most Impressive
Visualization
LiYuan

Vis #39

https://youtu.be/Tnz0bue_7vQ

gapminder

Name: Li Yunli
Student ID: 20659584

source: https://www.gapminder.org

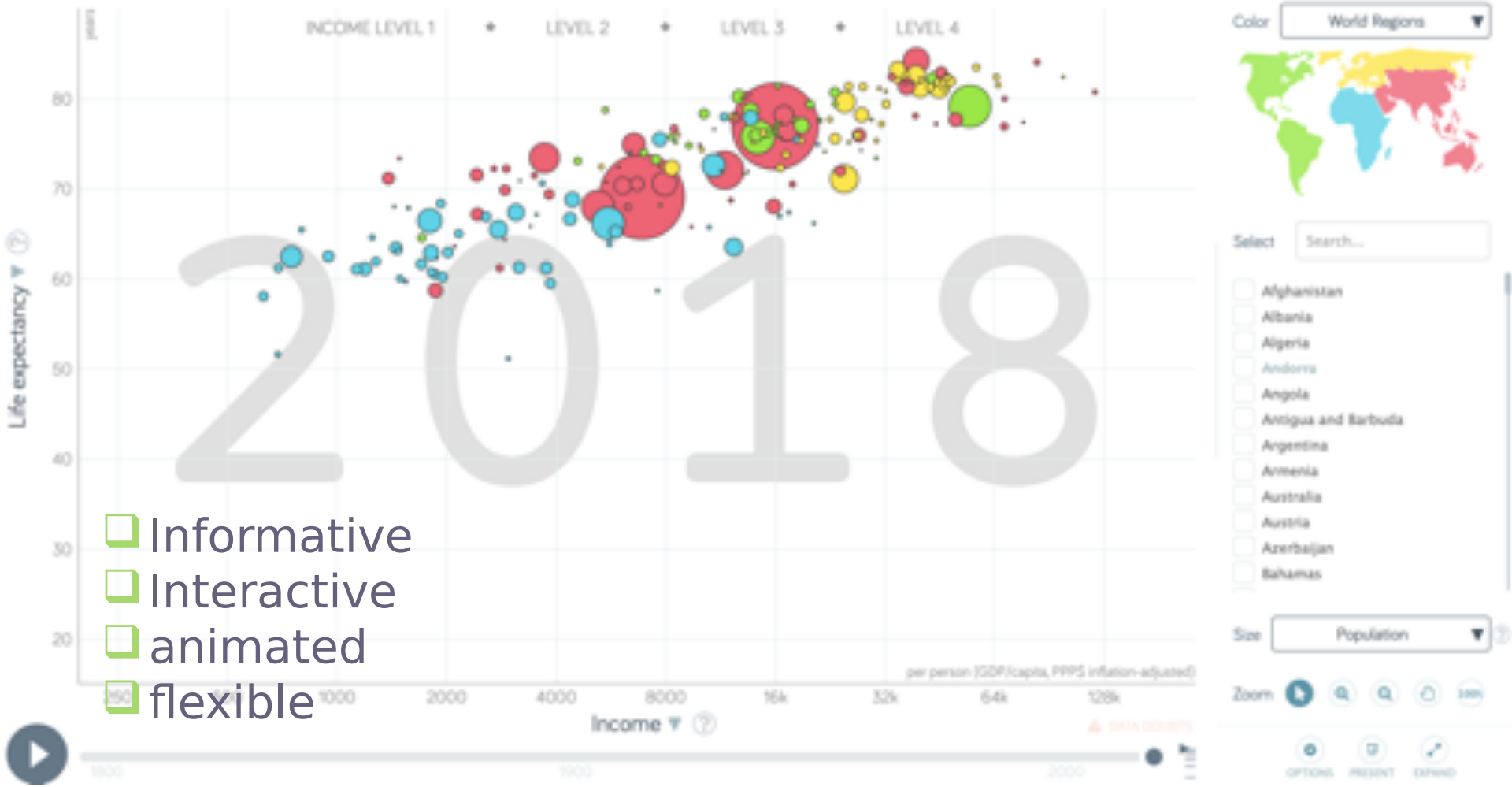
Factfulness

Ten Reasons We're Wrong A the World – and Why Things Better Than You Think

- 4 income levels

Income per person in dollars per day adjusted for price differences.

Source: Gapmind



- Informative
- Interactive
- animated
- flexible

Thank you

Source:
https://www.gapminder.org/tools/#$state$time$value=2018&delay:100;&marker$axis_x$domainMin:null&domainMax:null&zoomedMin:null&zoomedMax:null&spaceRef:null;;;&chart-type=bubbles

Vis #40

https://youtu.be/m5PSMNMID4w

THREAT CLOUD

Top Vis Competition - Lo Kok Kit (20547224)

What's That?

THREATCLOUD
LIVE CYBER THREAT MAP
17,683,183 ATTACKS ON THIS DAY
Check Point
Malware
Phishing
Exploit

THREATCLOUD

LIVE CYBER THREAT MAP

19,143,445 ATTACKS ON THIS DAY

Check Point
SOFTWARE TECHNOLOGIES LTD

MapView In Cyber Attack

Time Series Visualization

Real Time Notification

Use Color To Divide The Type

Malware Phishing Exploit

Some Statistic

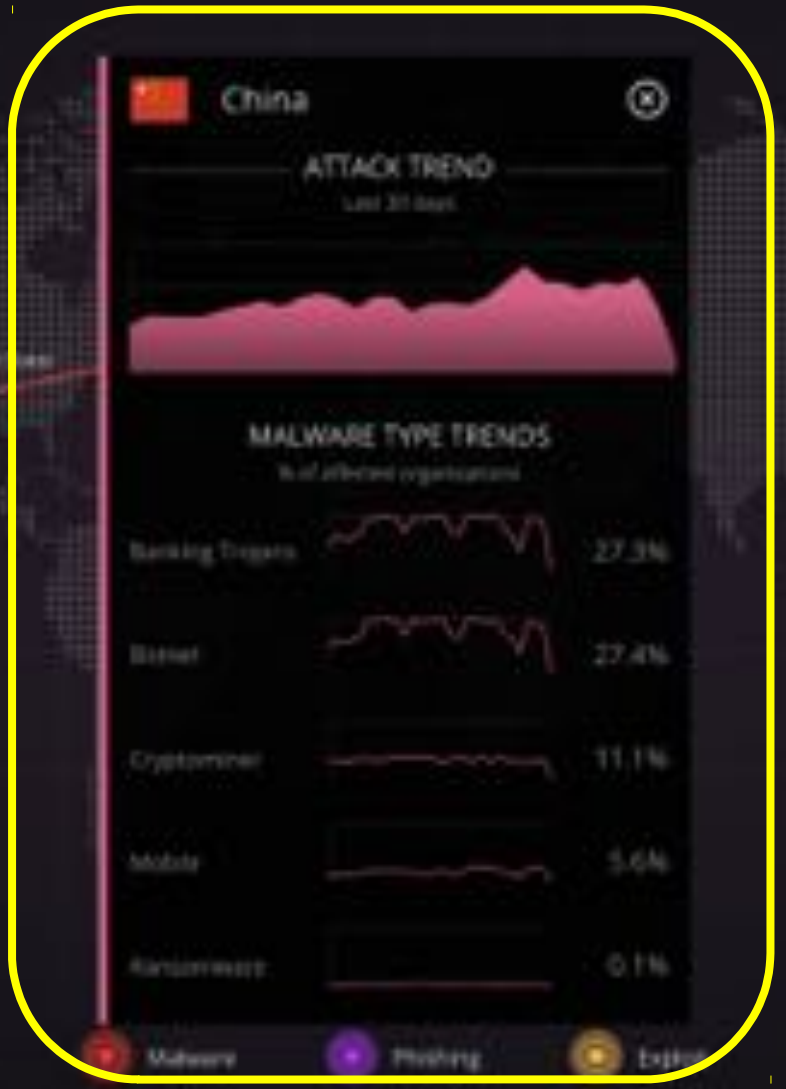
THREATCLOUD

LIVE CYBER THREAT MAP

20,377,780 ATTACKS ON THIS DAY

Check Point

Trend Visualization



Features

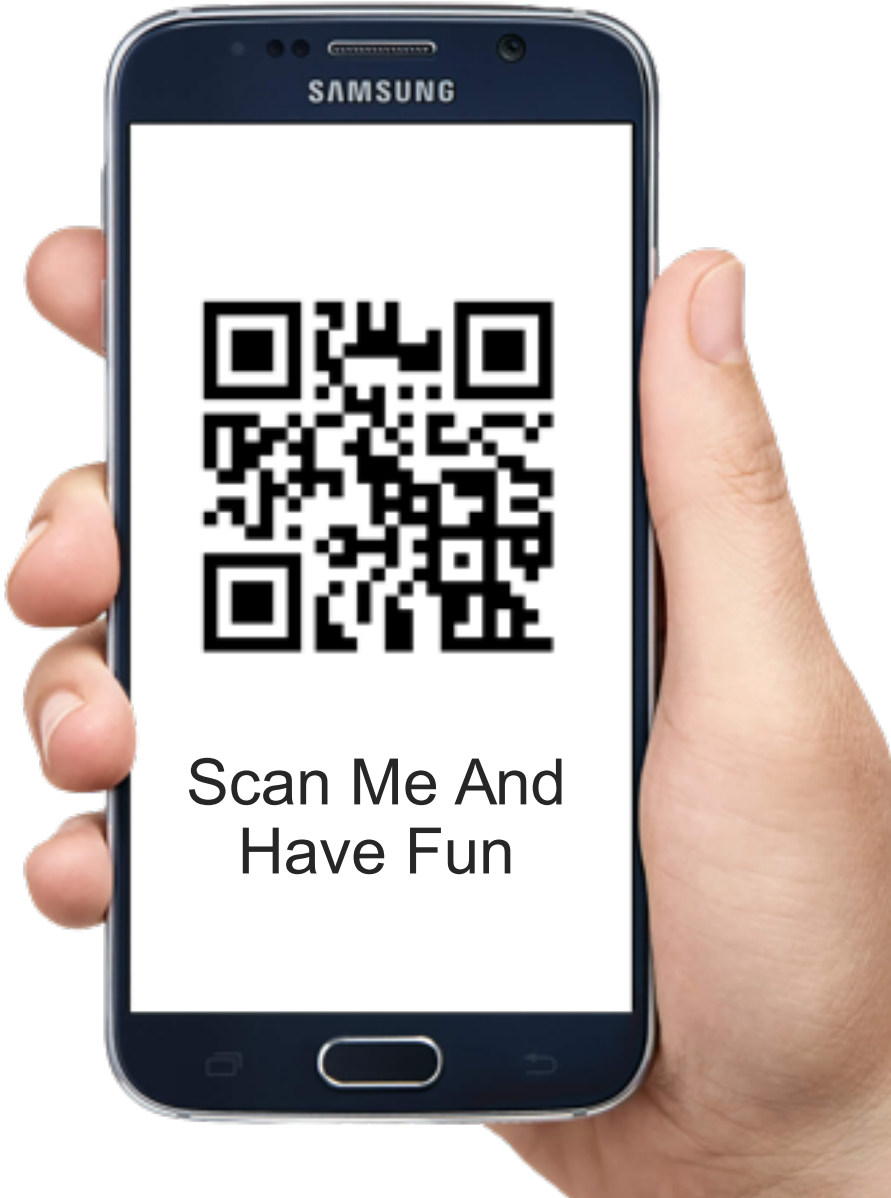
- Map View - Visualize Attack Path
- Color Encode - Show Diff Threat
- Statistic - Get Some Insight
- Notification - To Understand Threat

Q&A

THANK YOU

Presenter: Lo Kok Kit (20547224)

Ref Link: https://threatmap.checkpoint.com/



Vis #41

https://youtu.be/cCvjCAQiU7w

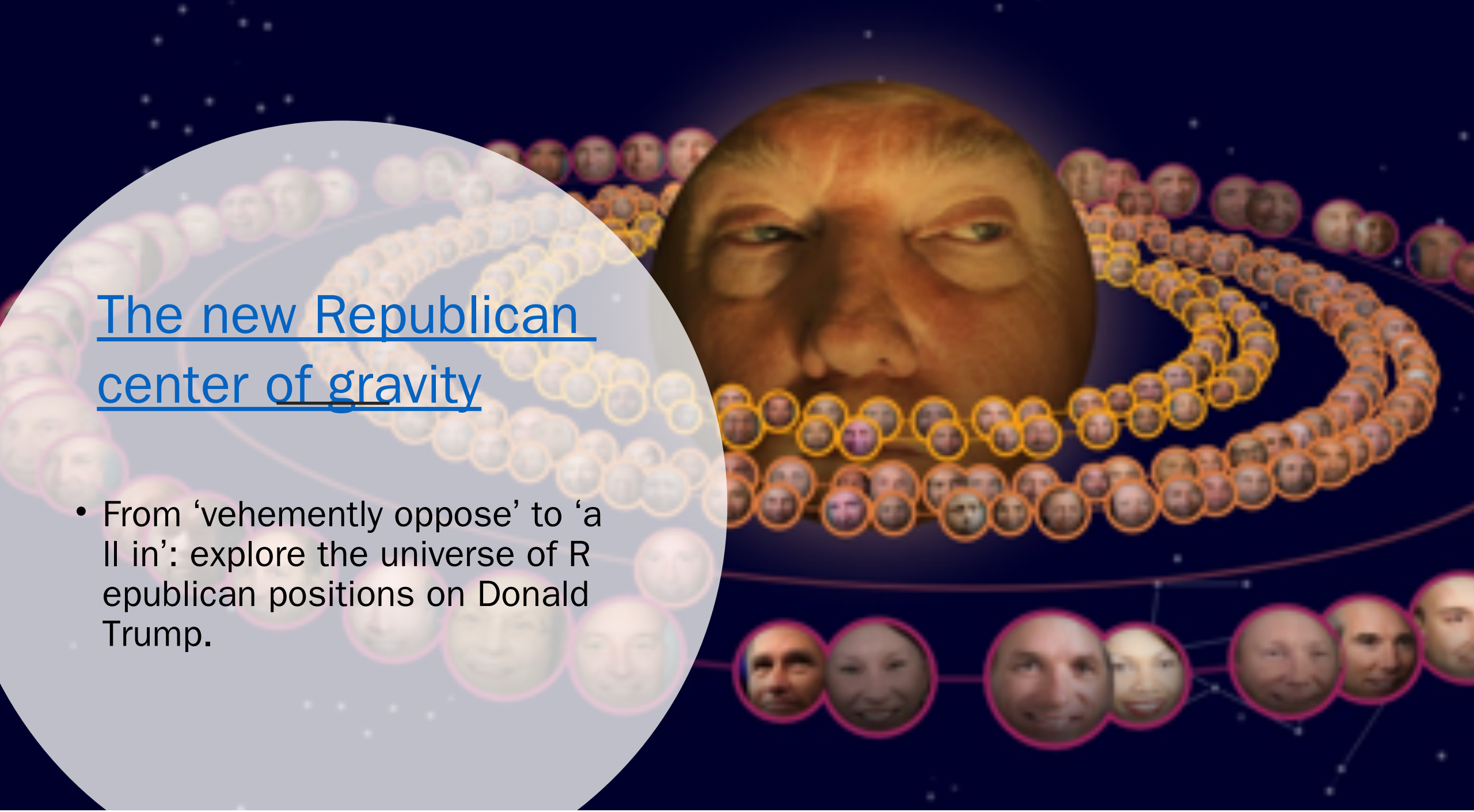
Top Data Visualization

Name ： LU Jinjing

ID ： 20616996

The new Republican center of gravity

- From ‘vehemently oppose’ to ‘a ll in’: explore the universe of R epublican positions on Donald Trump.

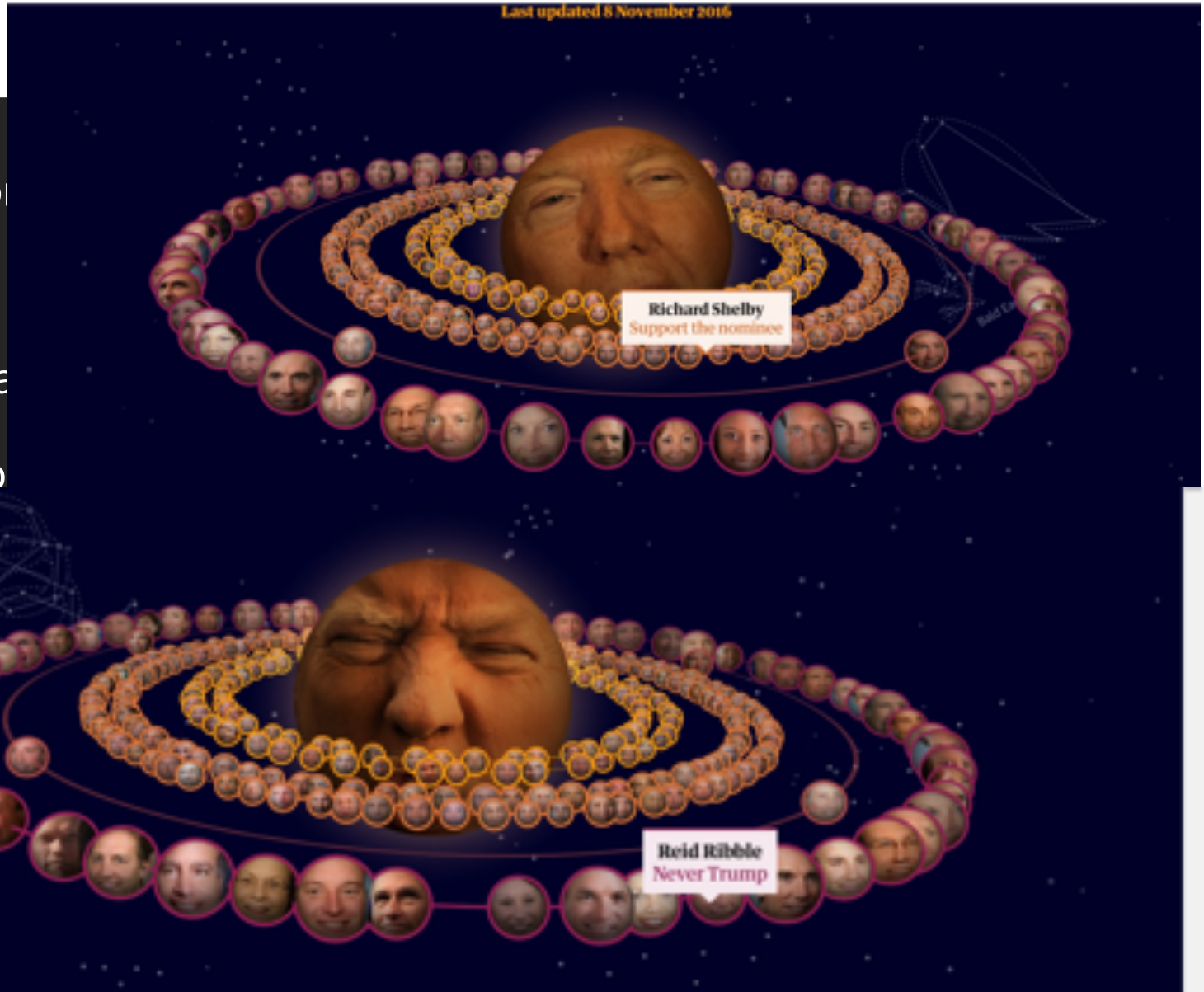


DATA

use colors, length (in chart) and positions (in ‘universe’)

Why ?

- Use a simple but hilarious way to co
  te data visualization
- Closely fitting to the reality
- Collect the attitude of each Republica
  nd make classification, also indicate
  number of Republicans in different p
  ons



THANKS

Vis #42

https://youtu.be/5Jl2uy-h7E8

Space Junk

MSBD 5005 Data Visualization

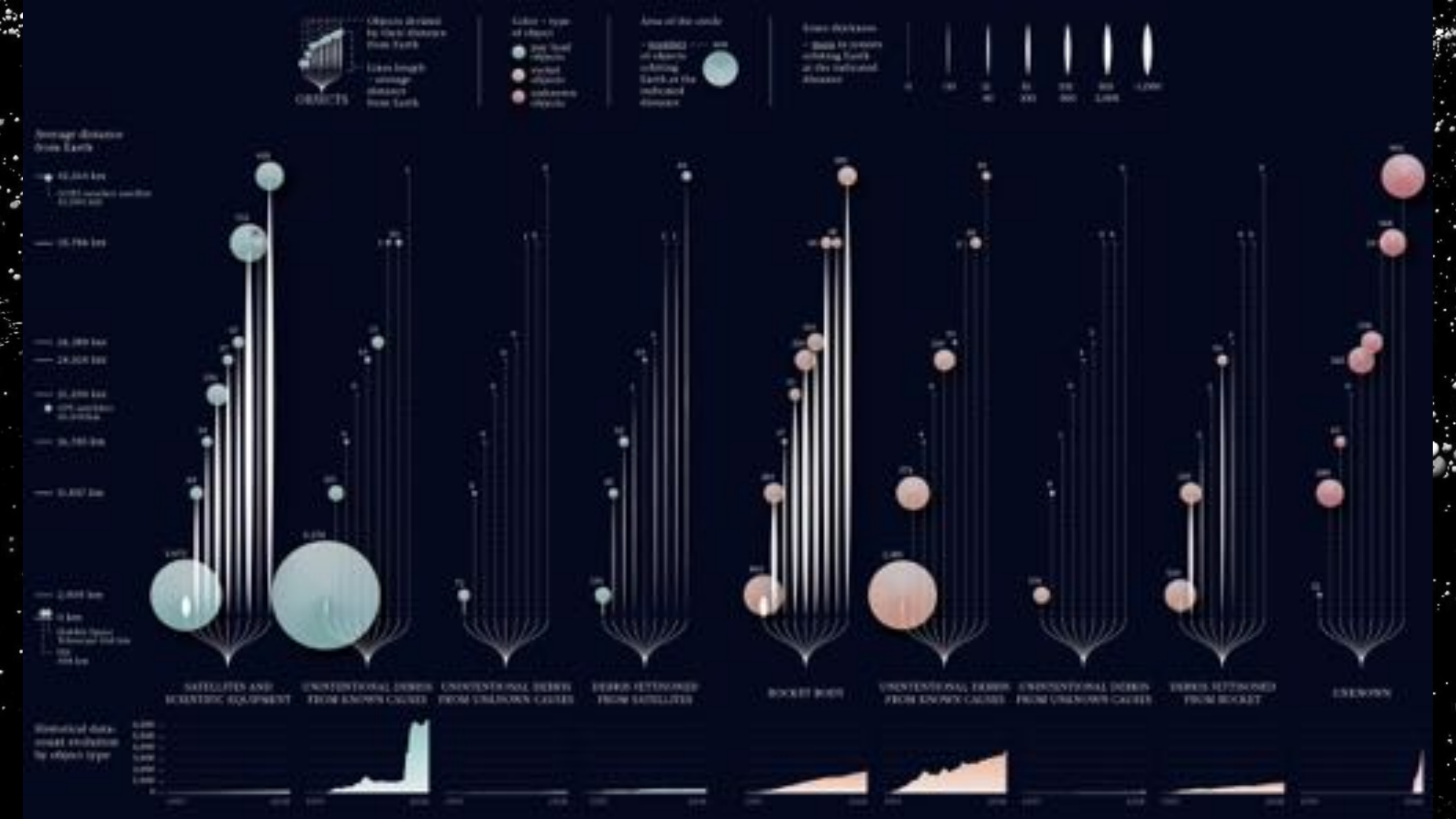
Top Vis Competition

Name: Ma Song

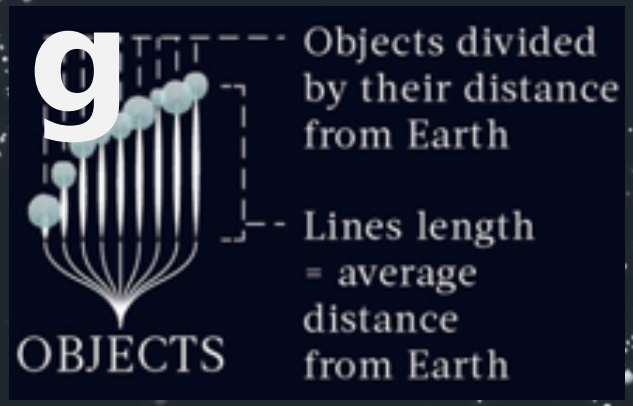
SID: 20659376

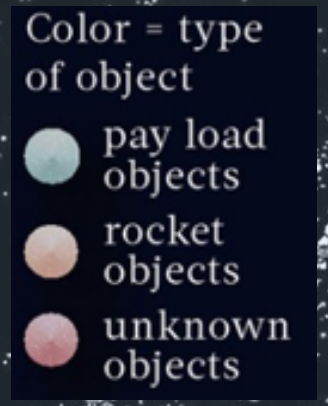
Source:

https://www.behance.net/gallery/81688575/Space-Junk-BBC-Science-Focus

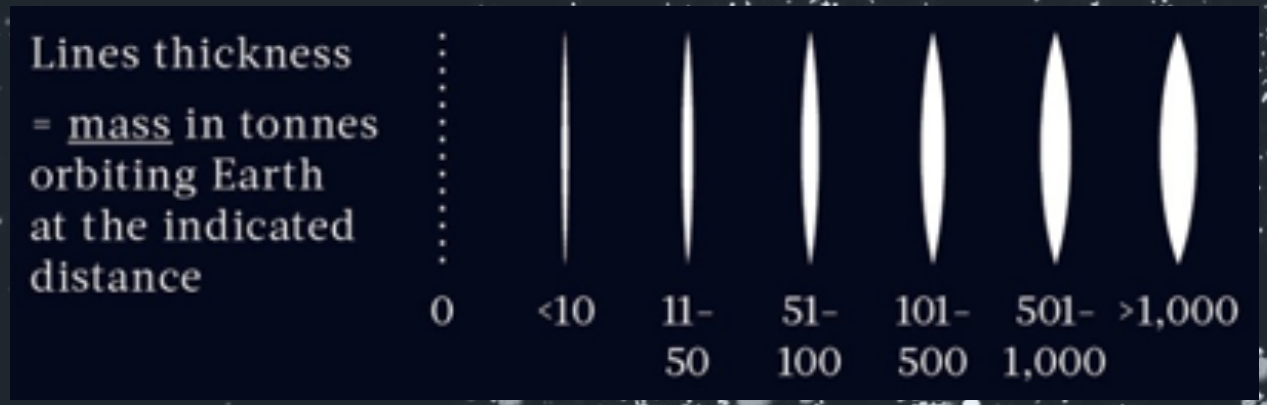

OBJECTS
Average distance from Earth
SATELLITES AND SCIENTIFIC EQUIPMENT
UNINTENTIONAL DEBRIS FROM KNOWN CAUSES
UNINTENTIONAL DEBRIS FROM UNKNOWN CAUSES
DEBRIS JETTISONED FROM SATELLITES
ROCKET BODY
UNINTENTIONAL DEBRIS FROM KNOWN CAUSES
UNINTENTIONAL DEBRIS FROM UNKNOWN CAUSES
DEBRIS JETTISONED FROM ROCKET
UNKNOWN

Encoding

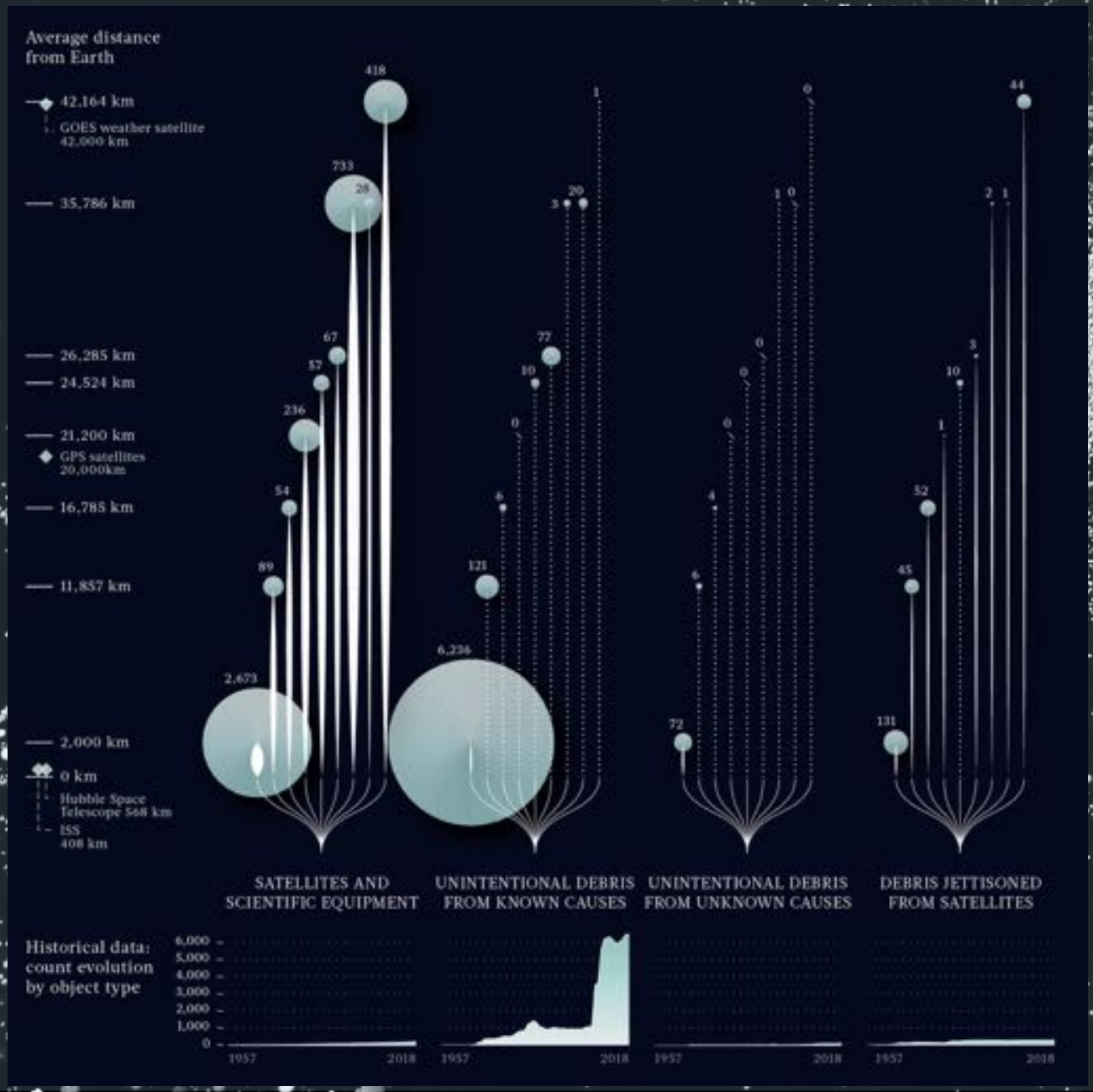

Objects divided by their distance from Earth
Lines length = average distance from Earth
OBJECTS


Color = type of object
pay load objects
rocket objects
unknown objects

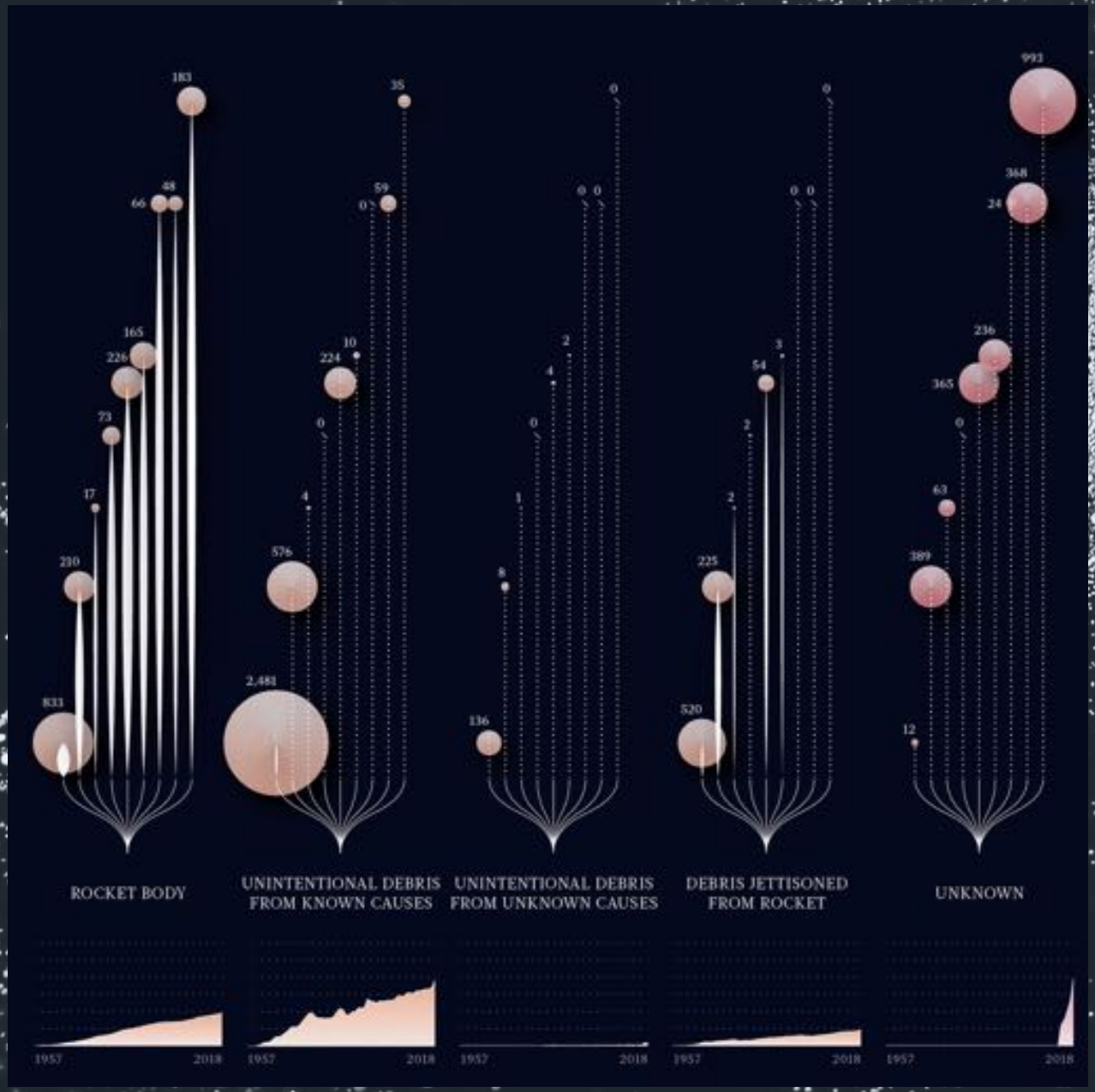
Area of the circle
= number of objects orbiting Earth at the indicated distance
600

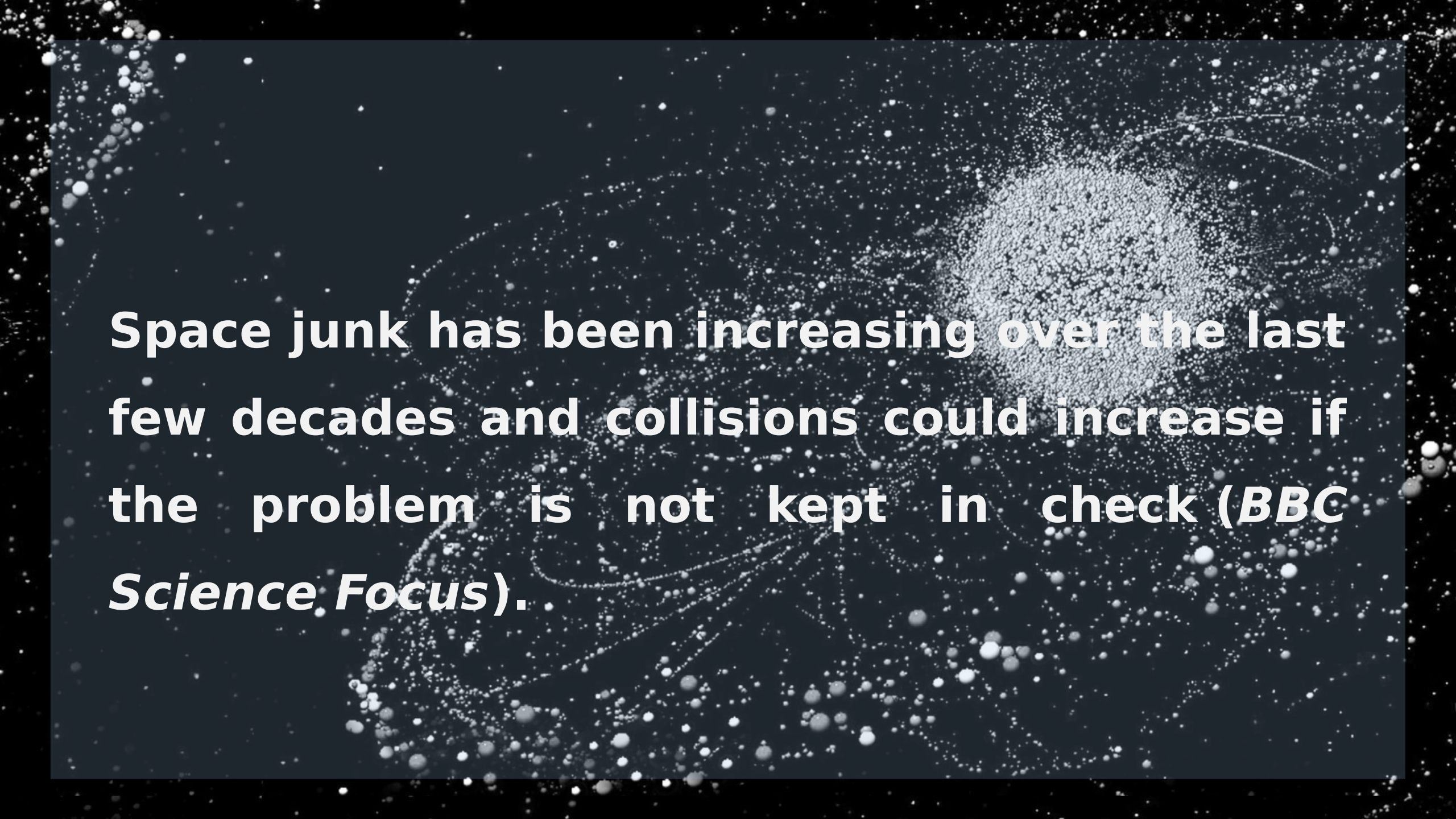

Lines thickness
= mass in tonnes orbiting Earth at the indicated distance
0
<10
11-50
51-100
101-500
501-1,000
>1,000

Details


Average distance from Earth
42,164 km
GOES weather satellite 42,000 km
35,786 km
26,285 km
24,524 km
21,200 km
GPS satellites 20,000km
16,785 km
11,857 km
2,000 km
0 km
Hubble Space Telescope 568 km
ISS 408 km
418
733
28
67
57
236
54
89
2,673
121
6,236
77
10
6
0
3
20
1
0
0
0
4
6
72
0
1
0
44
2
1
3
10
1
52
45
131
SATELLITES AND SCIENTIFIC EQUIPMENT
UNINTENTIONAL DEBRIS FROM KNOWN CAUSES
UNINTENTIONAL DEBRIS FROM UNKNOWN CAUSES
DEBRIS JETTISONED FROM SATELLITES
Historical data: count evolution by object type
6,000
5,000
4,000
3,000
2,000
1,000
0
1957
2018

Details


183
66
48
165
226
73
17
230
833
35
59
0
10
224
0
4
576
2,481
0
0
2
4
0
1
8
136
0
0
3
54
2
2
225
520
993
368
24
236
365
0
63
389
12
ROCKET BODY
UNINTENTIONAL DEBRIS FROM KNOWN CAUSES
UNINTENTIONAL DEBRIS FROM UNKNOWN CAUSES
DEBRIS JETTISONED FROM ROCKET
UNKNOWN
1957
2018
1957
2018
1957
2018
1957
2018
1957
2018


Space junk has been increasing over the last few decades and collisions could increase if the problem is not kept in check (*BBC Science Focus*).

Thank you!

Vis #43

https://youtu.be/-WspUbqbfy8

Ngai Yat Shing

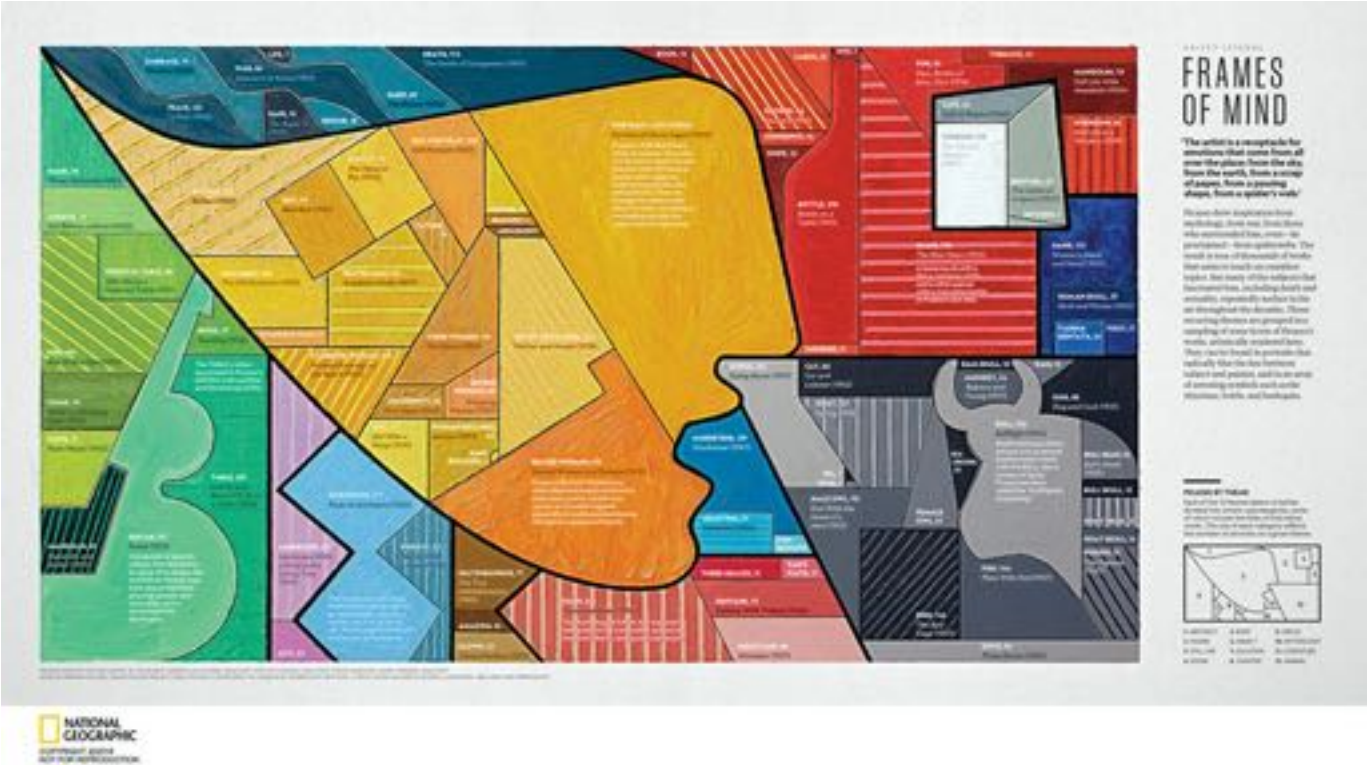
Picasso By Theme

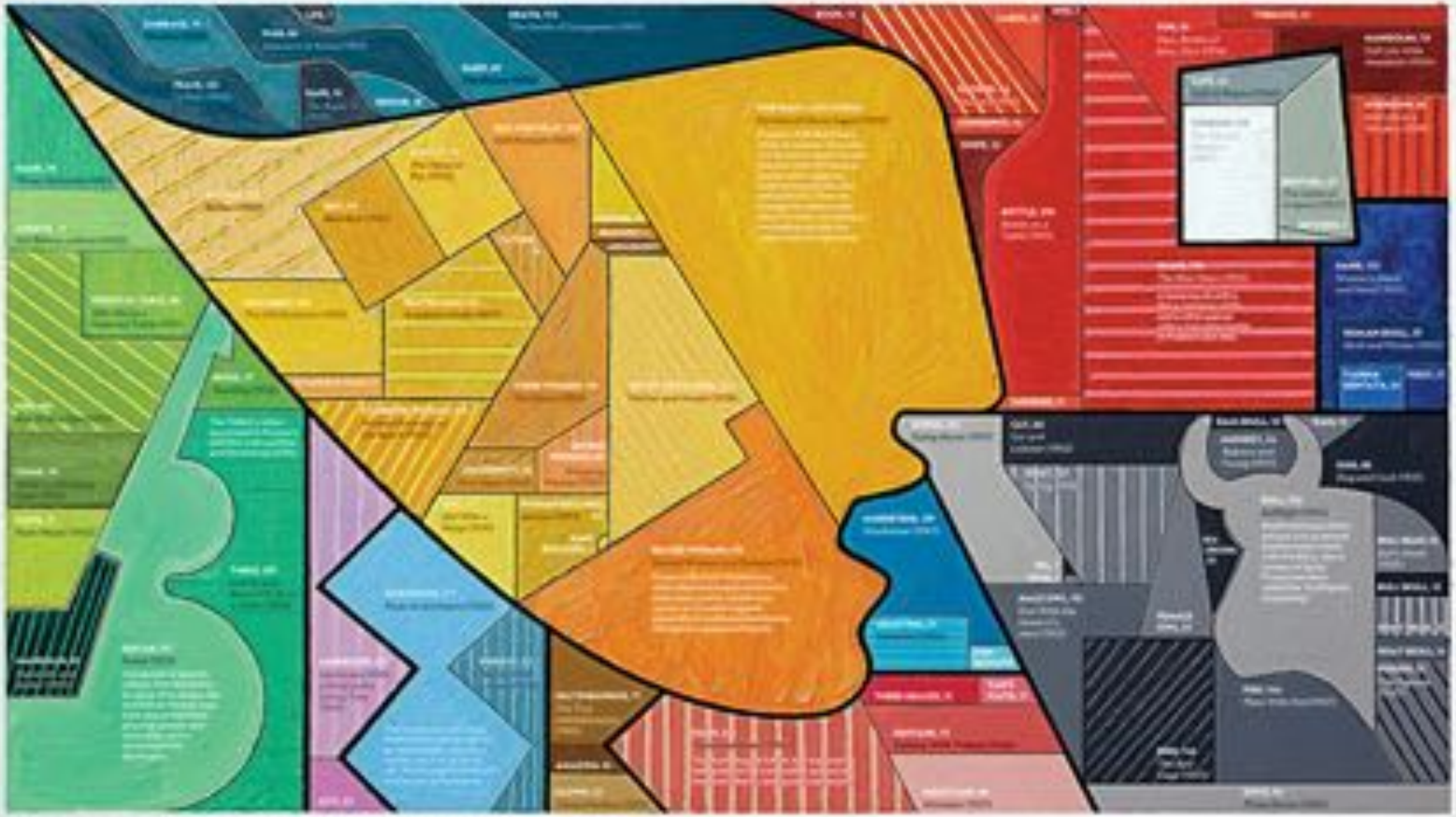
“I do not seek. I find.”

— Pablo Picasso

ANALYZING PICASSO USING PICASSO TECHNIQUES

Handmade Data Visualization (oil on canvas, 36 x 60 inches).





FRAMES OF MIND

'The artist is a receptacle for emotions that come from all over the place: from the sky, from the earth, from a scrap of paper, from a passing shape, from a spider's web.'

NATIONAL GEOGRAPHIC

Marks and Channel

- Areas
- Color Hue & Color Saturation
- Position
- Shape
- Size

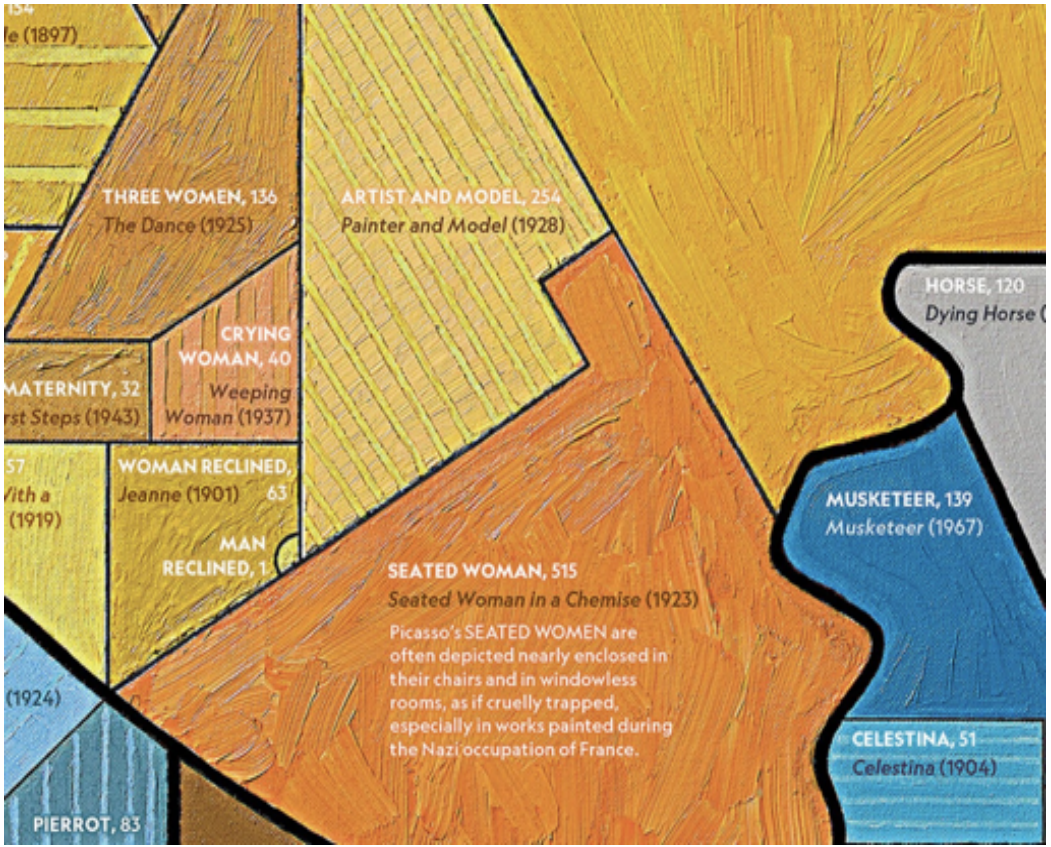
Encoding Scheme

- Group of 12 major themes and subcategories
  - -Spatial region, Position, Color Hue and Shape
- The number of artworks on that theme
  - The 2D size of the area of each category
- Theme of subcategories
  - Shape
  - Color Saturation

Hidden Layer of Encoding

The artist used Picasso's own technique to enrich the information in the visualization.

Allow the audience to feel the curves, lines, color, used shape, technique, painting material and even texture of painting to really sensation the beauty and charm of the artist.



Thank you

Vis #44

https://youtu.be/d780K0k1ypk

Music Timeline

Top Vis Competition

Ng Chi Ping (20489159)

artist: Miles Davis

Static Content Display & Infographics

https://www.pinterest.se/pin/2955555979187568/

Jazz Histor

fit into the

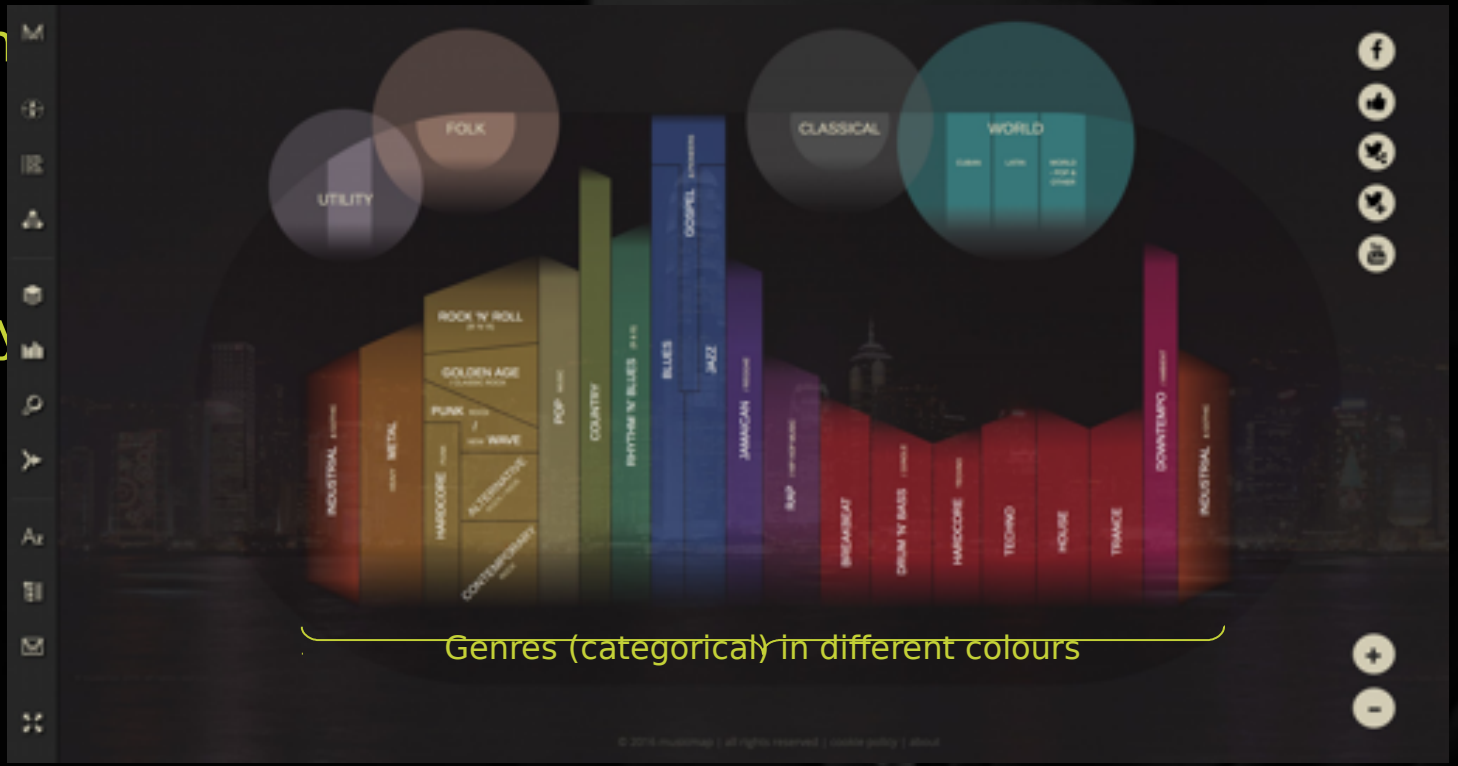
Or it gets Overcrowded

https://www.sutori.com/story/jazz-history-timeline--GzK

https://www.pinterest.com/pin/223069606270075O5/

The Music Map

- Th
- My
- vi

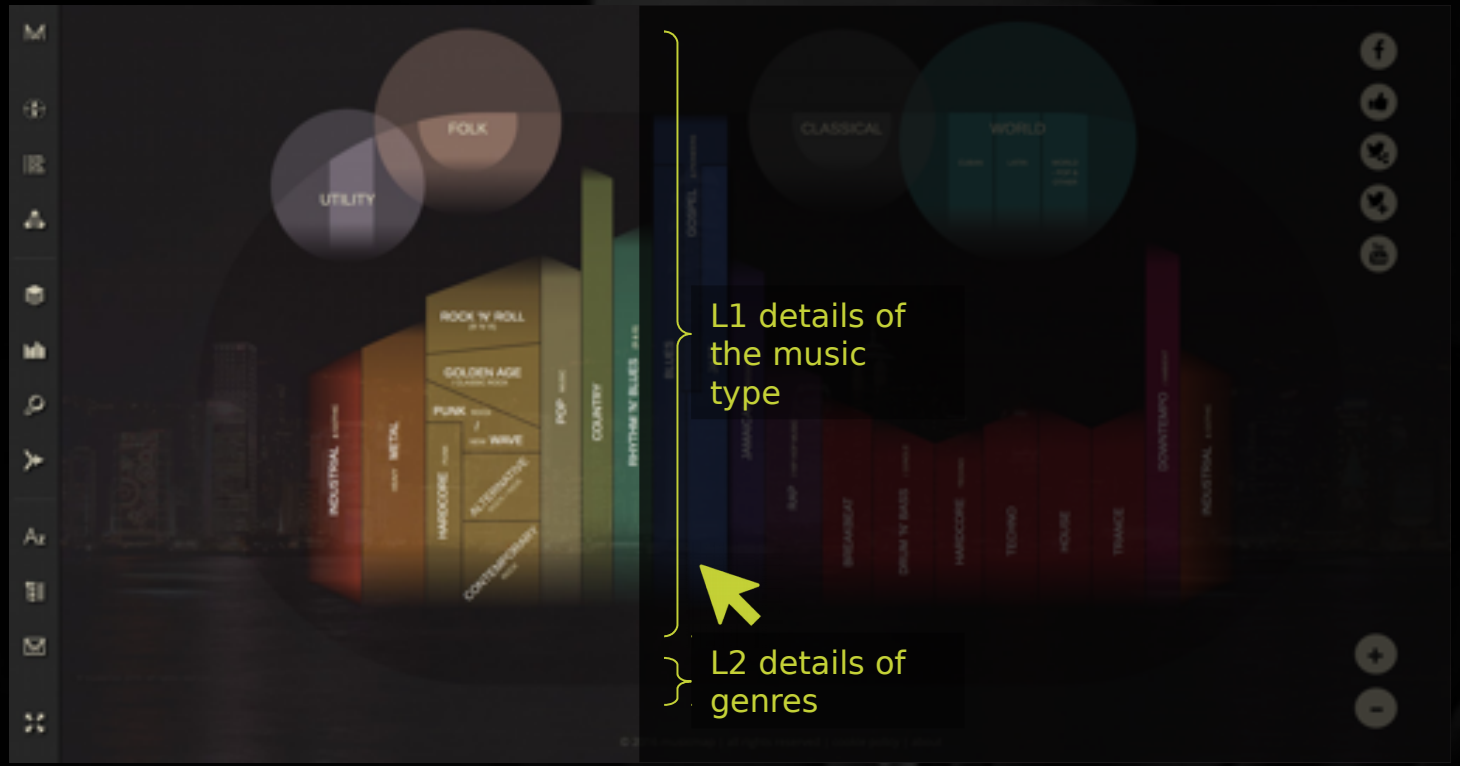


Genres (categorical) in different colours

artist: Dr Don Shirle

The Music Map

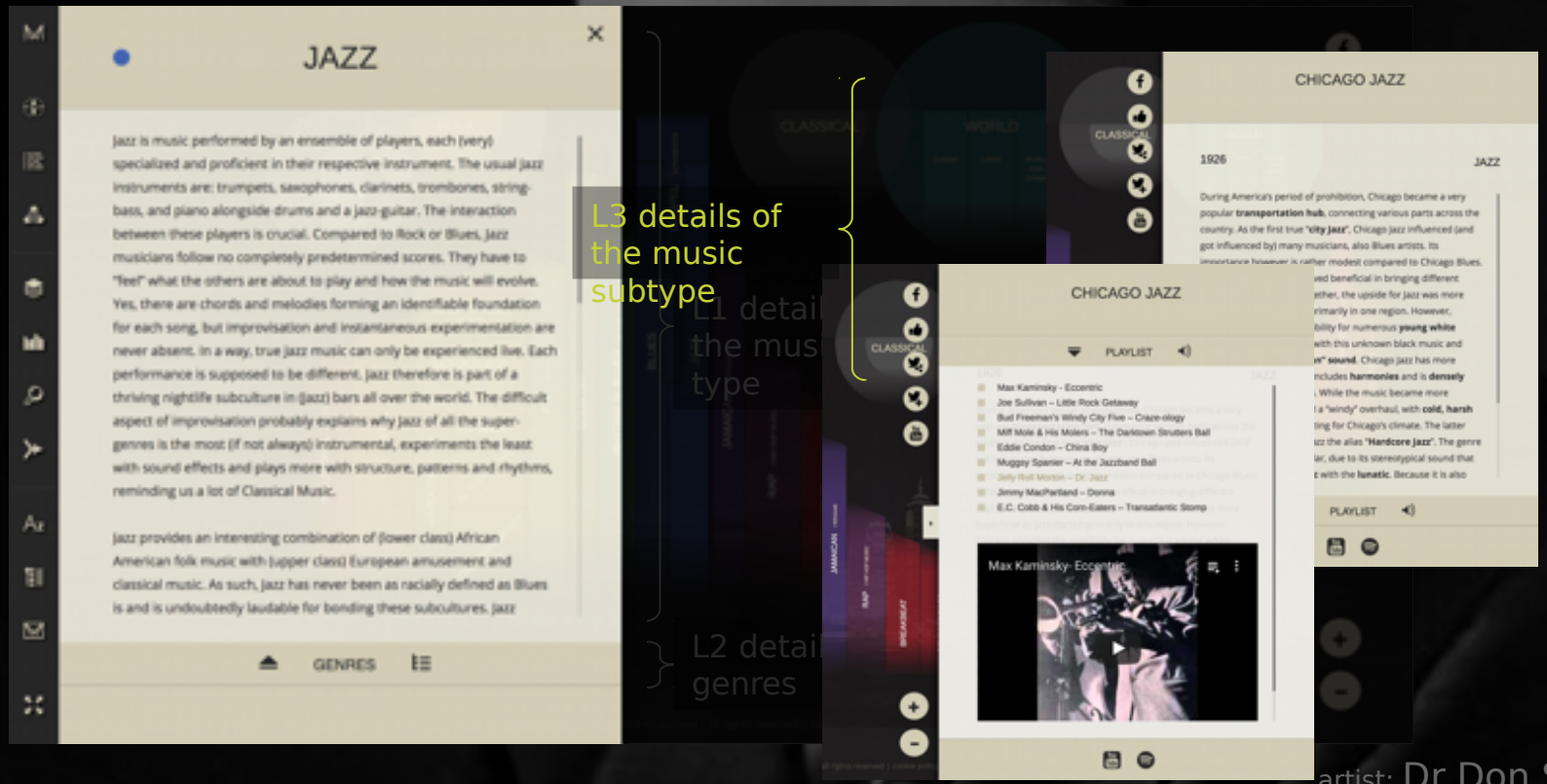
Overview First



artist: Dr Don Shirle

The Music Map

Overview First Details on Demand



artist: Dr Don Shirle

Levels of Details

Overview First Details on Demand

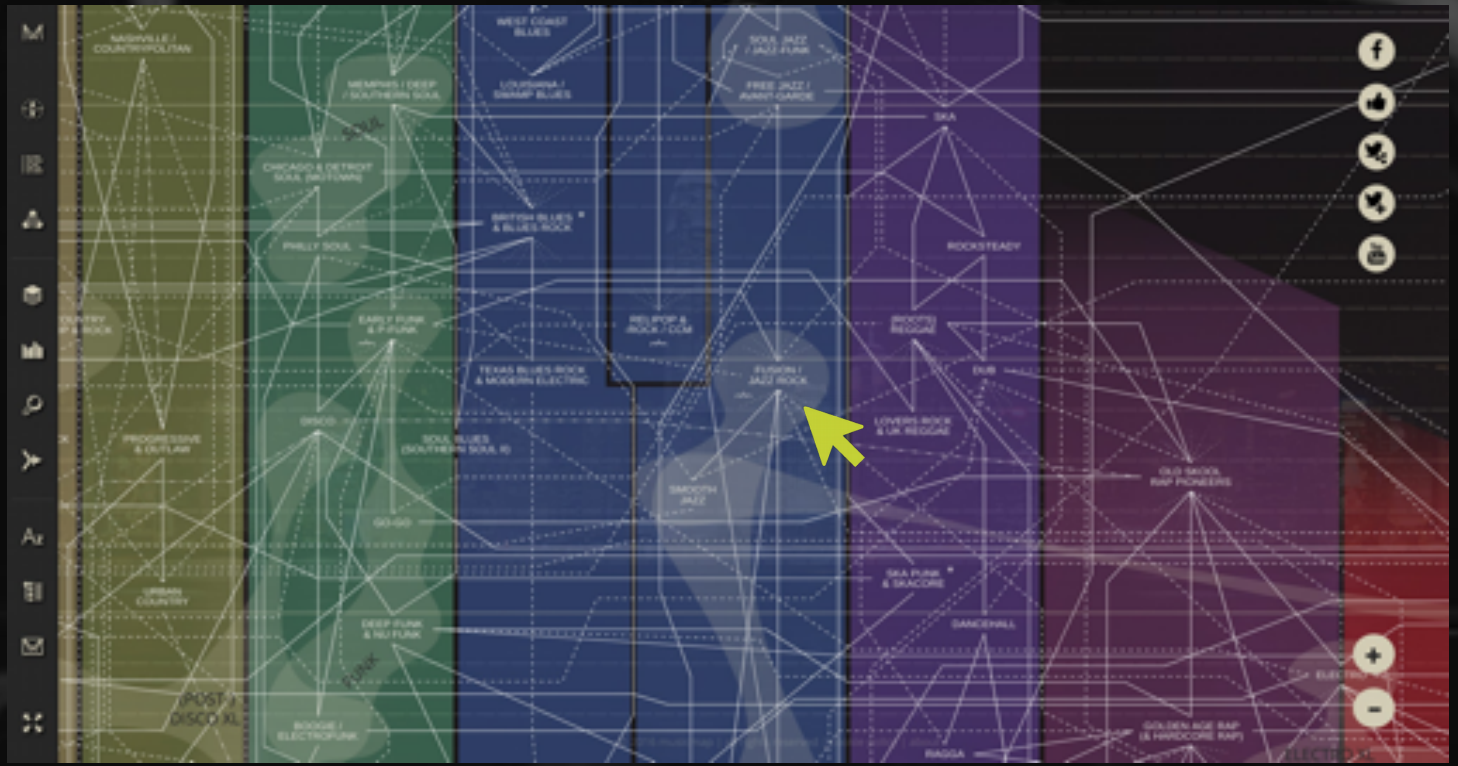
etwork of music subtypes

artist: Dave Brubeck

Time Dimension

artist: Dave Brubeck

Focus and Emphasise



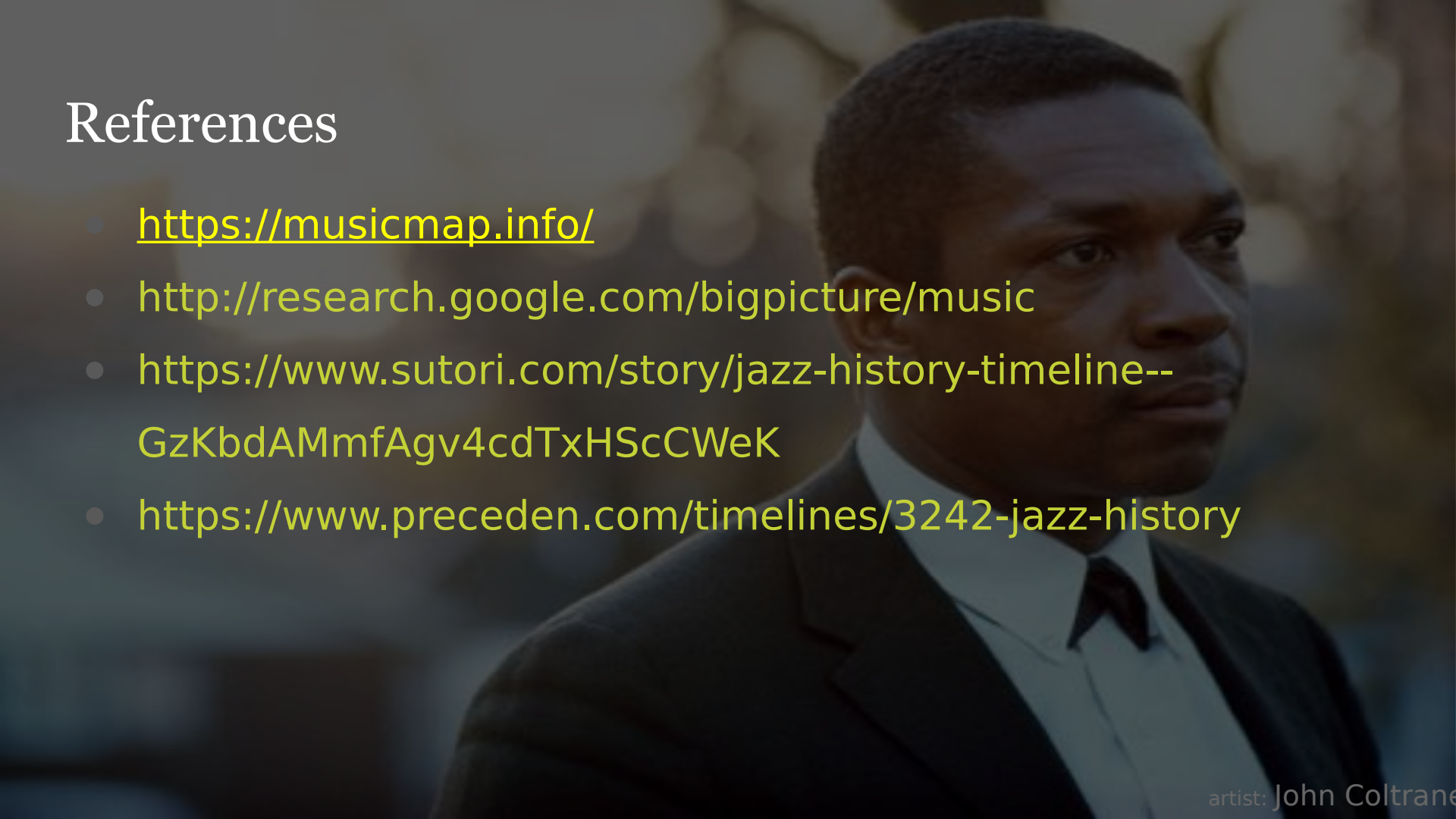
artist: Dave Brubec

Legend, Description & Objective

artist: Dave Brubec

References

- https://musicmap.info/
- http://research.google.com/bigpicture/music
- https://www.sutori.com/story/jazz-history-timeline--GzKbdAMmfAgv4cdTxHScCWeK
- https://www.preceden.com/timelines/3242-jazz-history



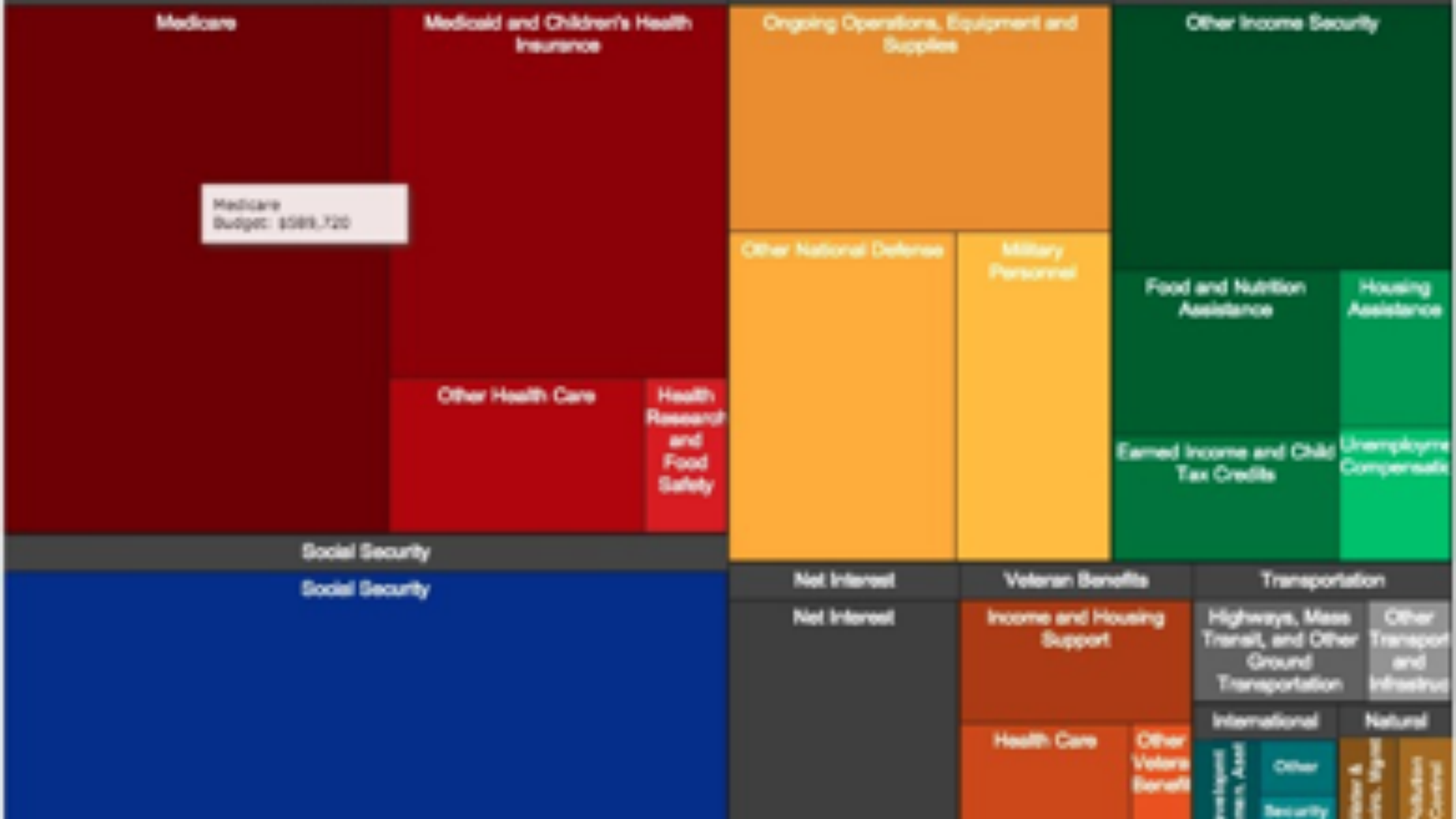
Thank You
artist: Frank Sinatra

Vis #45

https://www.youtube.com/watch?v=kC2YmCLESDM

Soonam Kalyan Panda
20559136

MSBD5005 TOP VIS COMPETITION


Medicare
Medicaid and Children's Health Insurance
Ongoing Operations, Equipment and Supplies
Other Income Security
Medicare
Budget: $589,720
Other National Defense
Military Personnel
Food and Nutrition Assistance
Housing Assistance
Other Health Care
Health Research and Food Safety
Earned Income and Child Tax Credits
Unemployme Compensatio
Social Security
Net Interest
Veteran Benefits
Transportation
Social Security
Net Interest
Income and Housing Support
Highways, Mass Transit, and Other Ground Transportation
Other Transport and Infrastruc
International
Natural
Health Care
Other Vetera Benefit
Other
Security

US Office of Management and Budget (2016)

- Provides the insight of whole country’s budget in just few squares.
- A simple treemap that explains where each dollar is spent. (Data focused)
- Caters to larger audience base.(Not specific to govt. or finance analysts).
- Uses sufficient contrast between the colors to differentiate the categories.

- Source :

https://obamawhitehouse.archives.gov/

Thank You

Vis #46

https://www.youtube.com/watch?v=-Xfw7tjJiXs

HISTORY OF ROCK (IN 100 SONGS)

KASIDIT PRUEKWANGKHAO

20654261

The Beatles

1960 - 1970

George Harrison, John Lennon, Paul McCartney, Ringo Starr

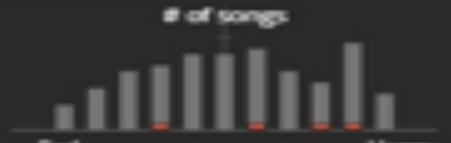
Song Stats

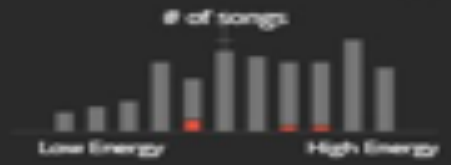
She Said She Said (1966)

Tomorrow Never Knows (1966)

A Day in the Life (1967)

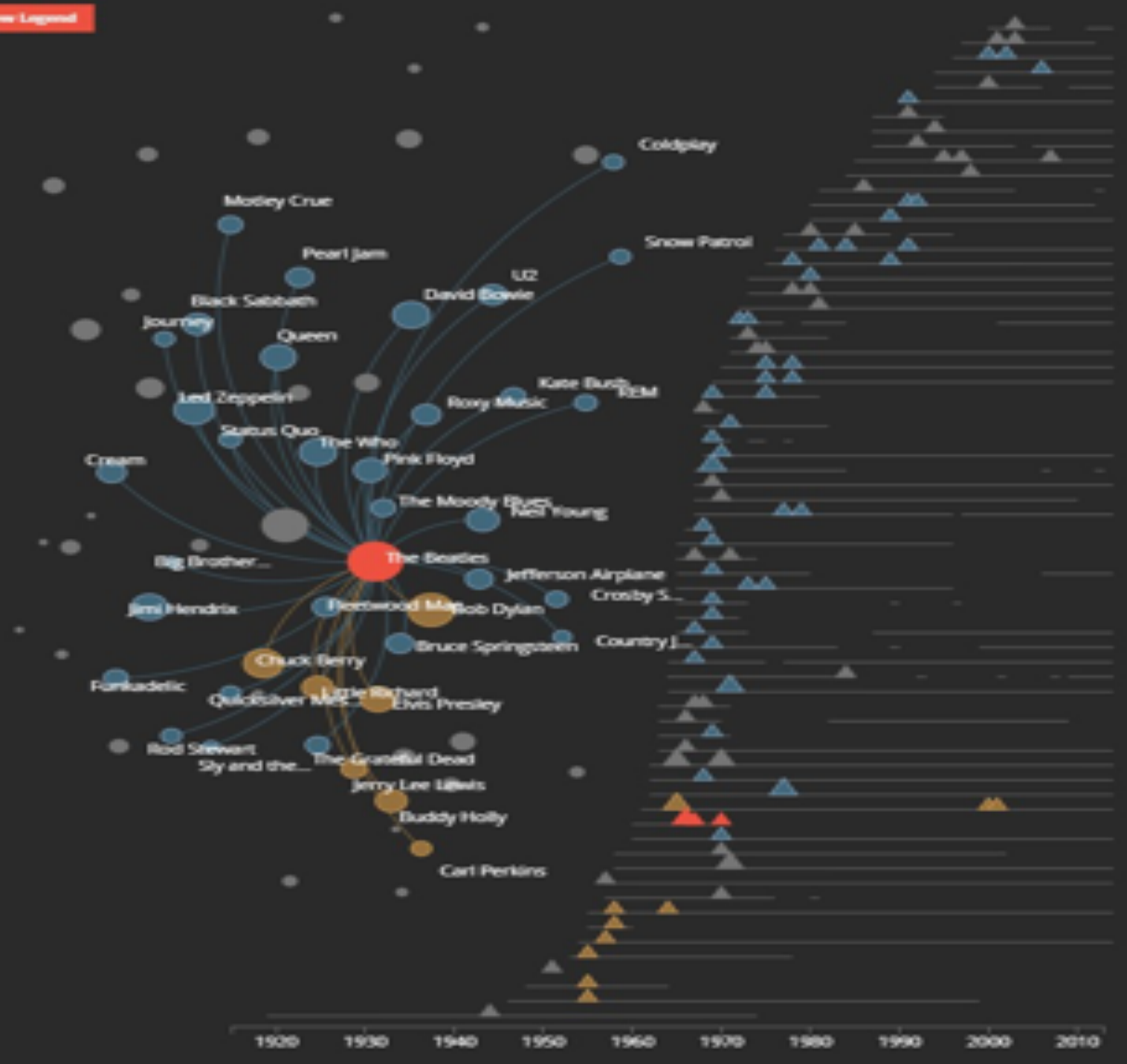
Let it Be (1970)





Selected band's songs compared to all songs

Show Legend



The Darkness
The White Stripes
Coldplay
Snow Patrol
Limp Bizkit
Pearl Jam
Nirvana
Green Day
Alice in Chains
Radiohead
The Offspring
Run DMC
REM
Motley Crue
Dire Straits
U2
Kate Bush
Journey
AC/DC
Van Halen
Roxy Music
Paul McCartney and...
Patti Smith
Queen
Bruce Springsteen
Led Zeppelin
Jury
Funkadelic
Crosby Stills & Na...
Black Sabbath
Sly and the Family...
Santana
Joni Mitchell
Fleetwood Mac
Cream
The Grateful Dead
The Doors
Quicksilver Messen...
Pink Floyd
Jefferson Airplane
Country Joe and th...
Big Brother and th...
The Who
The Moody Blues
Spinal Tap
Rod Stewart
The Jimi Hendrix E...
John Mayall and Th...
Jimi Hendrix
Eric Clapton
The Rolling Stones
Status Quo
David Bowie
Bob Dylan
The Beatles
Neil Young
George Harrison
Carole King
The Crickets
John Lennon
Chuck Berry
Buddy Holly
Jerry Lee Lewis
Elvis Presley
Jackie Brenston an...
Little Richard
Carl Perkins
Sister Rosetta Tha...

The Beatles

1960 - 1970

George Harrison, John Lennon, Paul McCartney, Ringo Starr

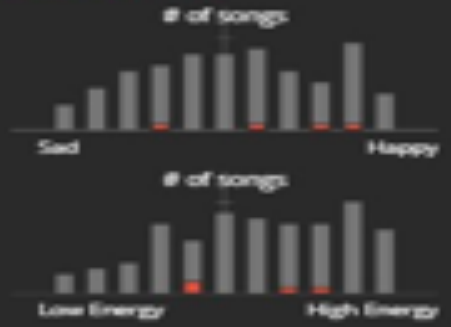
Song Stats

She Said She Said (1966)

Tomorrow Never Knows (1966)

A Day in the Life (1967)

Let it Be (1970)



Selected band's songs compared to all songs

Show Legend

Coldplay
Motley Crue
Snow Patrol
Pearl Jam
U2
David Bowie
Black Sabbath
Journey
Queen
Led Zeppelin
Kate Bush
REM
Roxy Music
Status Quo
The Who
Pink Floyd
Cream
The Moody Blues
Neil Young
Big Brother...
The Beatles
Jefferson Airplane
Crosby S...
Jimi Hendrix
Fleetwood Mac
Bob Dylan
Country J...
Bruce Springsteen
Chuck Berry
Funkadelic
Quicksilver Mes...
Little Richard
Elvis Presley
Rod Stewart
Sly and the...
The Grateful Dead
Jerry Lee Lewis
Buddy Holly
Carl Perkins

1920 1930 1940 1950 1960 1970 1980 1990 2000 2010

The Darkness
The White Stripes
Coldplay
Snow Patrol
Limp Bizkit
Pearl Jam
Nirvana
Green Day
Alice in Chains
Radiohead
The Offspring
Run DMC
REM
Motley Crue
Dire Straits
U2
Kate Bush
Journey
AC/DC
Van Halen
Roxy Music
Paul McCartney and...
Patti Smith
Queen
Bruce Springsteen
Led Zeppelin
Jury
Funkadelic
Crosby Stills & Na...
Black Sabbath
Sly and the Family...
Santana
Joni Mitchell
Fleetwood Mac
Cream
The Grateful Dead
The Doors
Quicksilver Messen...
Pink Floyd
Jefferson Airplane
Country Joe and th...
Big Brother and th...
The Who
The Moody Blues
Spinal Tap
Rod Stewart
The Jimi Hendrix E...
John Mayall and Th...
Jimi Hendrix
Eric Clapton
The Rolling Stones
Status Quo
David Bowie
Bob Dylan
The Beatles
Neil Young
George Harrison
Carole King
The Crickets
John Lennon
Chuck Berry
Buddy Holly
Jerry Lee Lewis
Elvis Presley
Jackie Brenston an...
Little Richard
Carl Perkins
Sister Rosetta Tha...

Led Zeppelin

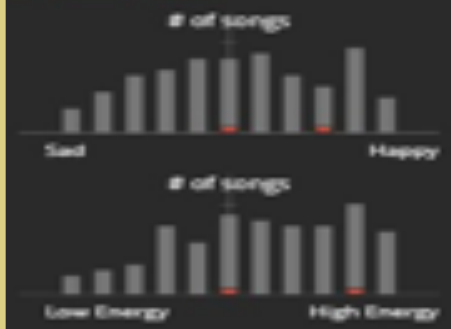
1968 - 1980

Jimmy Page, Robert Plant, John Paul Jones, John Bonham

Song Stats

Communication Breakdown (1969)

Kashmir (1975)



Selected band's songs compared to all songs

Show Legend

Alice in Chains
Nirvana
The Darkness
Spinal Tap
Motley Crue
Pearl Jam
The White Stripes
Van Halen
Journey
Queen
AC/DC
Led Zeppelin
Cream
The Rolling Stones
The Beatles
Jimi Hendrix
Fleetwood Mac
Chuck Berry
Funkadelic
Elvis Presley

1920 1930 1940 1950 1960 1970 1980 1990 2000 2010

The Darkness
The White Stripes
Coldplay
Snow Patrol
Limp Bizkit
Pearl Jam
Nirvana
Green Day
Alice in Chains
Radiohead
The Offspring
Run DMC
REM
Motley Crue
Dire Straits
U2
Kate Bush
Journey
AC/DC
Van Halen
Roxy Music
Paul McCartney and...
Patti Smith
Queen
Bruce Springsteen
Led Zeppelin
Jolly
Funkadelic
Crosby Stills & Na...
Black Sabbath
Sly and the Family...
Santana
Joni Mitchell
Fleetwood Mac
Cream
The Grateful Dead
The Doors
Quicksilver Messen...
Pink Floyd
Jefferson Airplane
Country Joe and th...
Big Brother and th...
The Who
The Moody Blues
Spinal Tap
Rod Stewart
The Jimi Hendrix E...
John Mayall and Th...
Jimi Hendrix
Eric Clapton
The Rolling Stones
Status Quo
David Bowie
Bob Dylan
The Beatles
Neil Young
George Harrison
Carole King
The Crickets
John Lennon
Chuck Berry
Buddy Holly
Jerry Lee Lewis
Elvis Presley
Jackie Brenston an...
Little Richard
Carl Perkins
Sister Rosetta Tha...

The Beatles

1960 - 1970

George Harrison, John Lennon, Paul McCartney, Ringo Starr

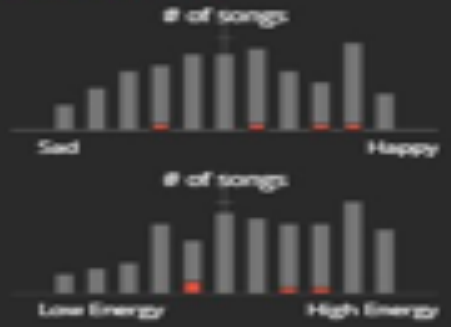
Song Stats

She Said She Said (1966)

Tomorrow Never Knows (1966)

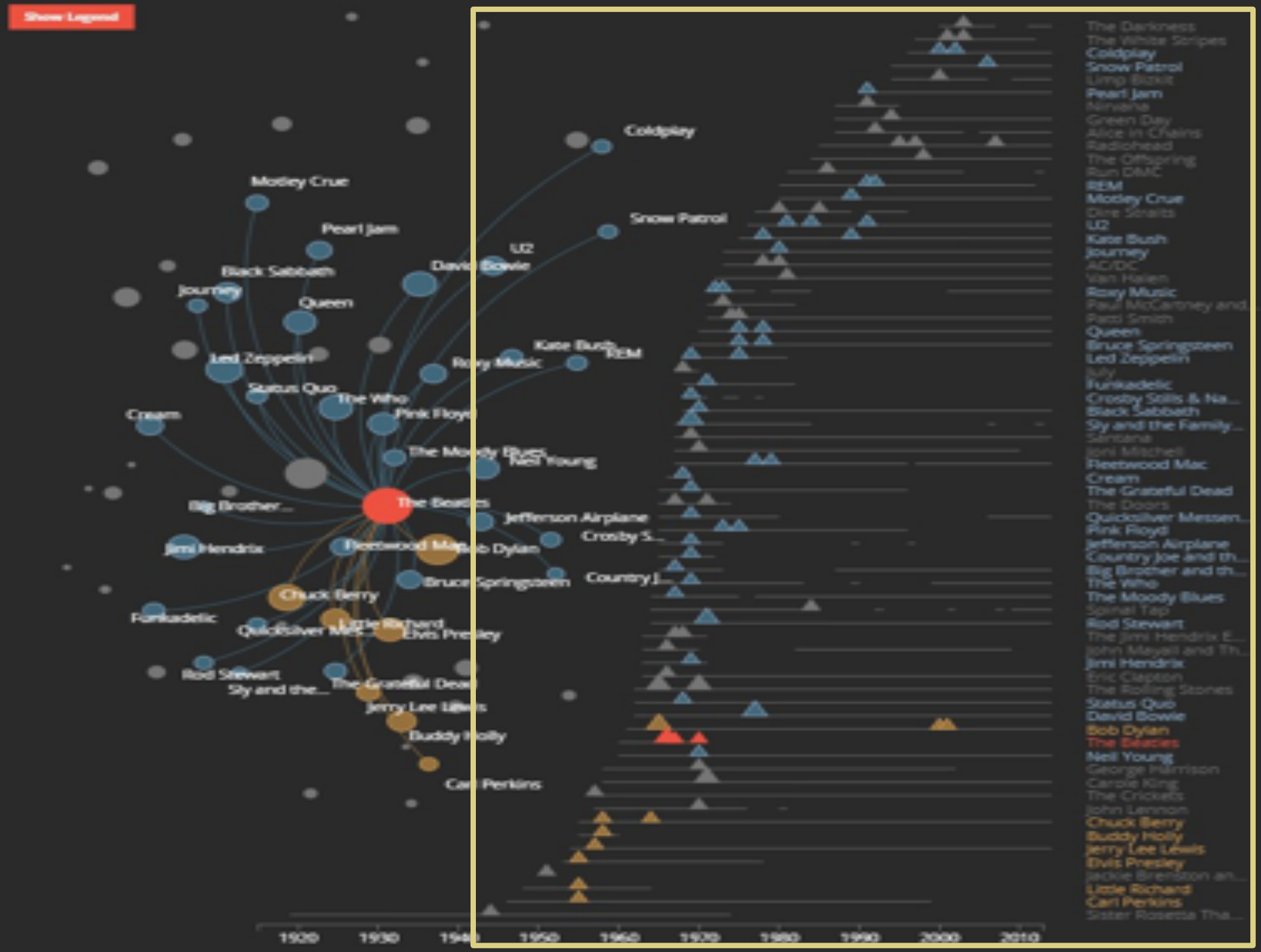
A Day in the Life (1967)

Let it Be (1970)



Selected band's songs compared to all songs

Show Legend



Vis #47

https://drive.google.com/file/d/1IrkkTw35OSKmf-CB7OJqB3jqf81O2F3Q/view?usp=sharing

Global Trade

Kabir Rajput

20560795

High Level View

Top Points

Eyes beat memory

Resolution over immersion

One primary action per screen

Consistency

Great design - Dynamic

Things to Improve

OVERVIEW FIRST -> ZOOM AND FILTER -> DETAILS ON DEMAND

COLOUR SCHEME

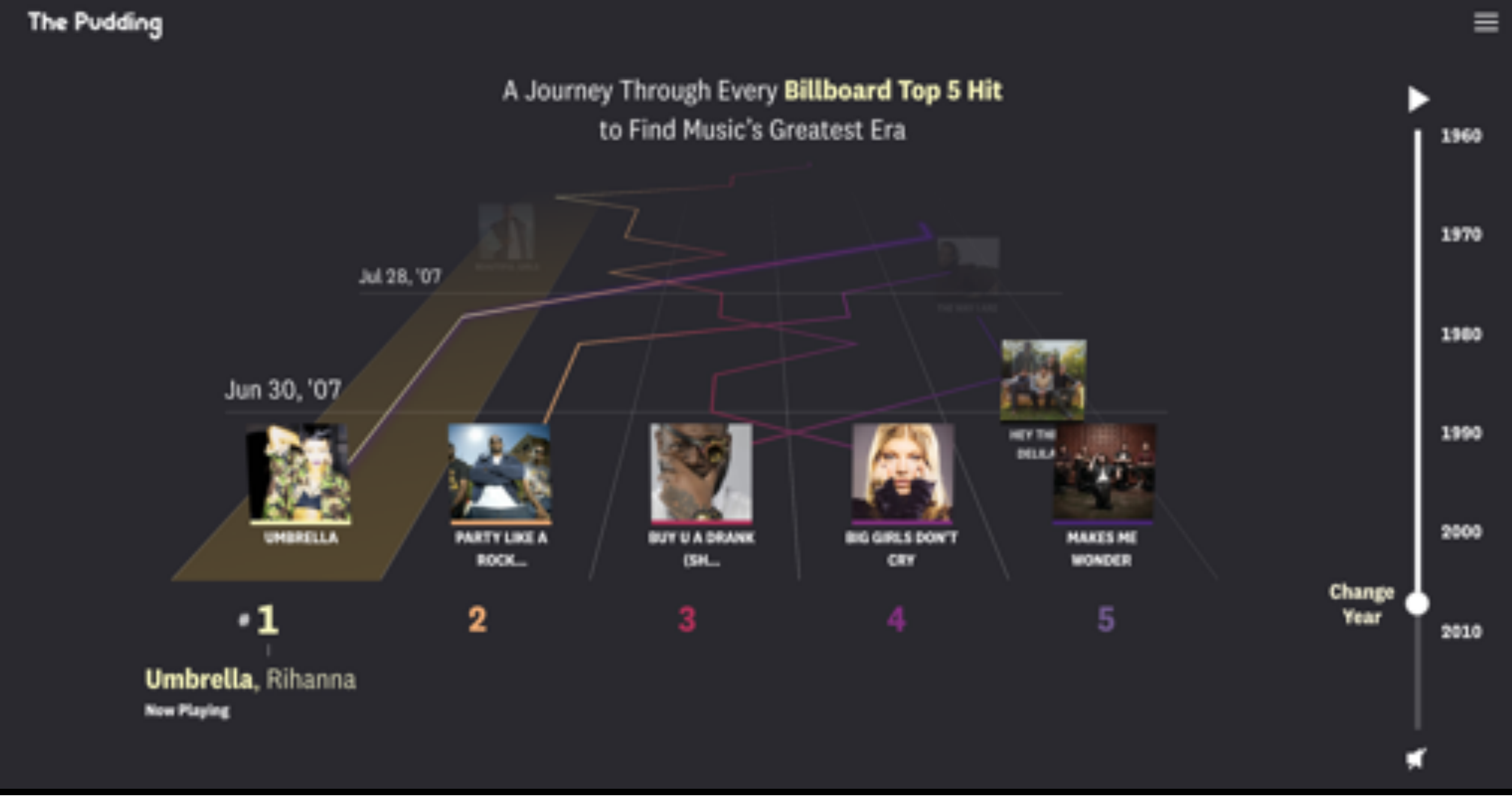
https://www.visualcapitalist.com/interactive-mapping-flow-international-trade/

Vis #48

https://youtu.be/9Ro35DMCB1o

TOPVIZ COMPETITION
A JOURNEY THROUGH EVERY BILLBOARD TOP 5 HIT

Céline ROSIER
20666812



https://pudding.cool/projects/music-history/

This viz is the best because...

... it respects Shneiderman’s mantra

The Pudding

OVERVIEW FIRST

A Journey Through Every **Billboard Top 5 Hit** to Find Music's Greatest Era

TITLE

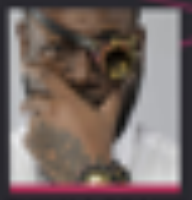
DATE

Jul 28, '07

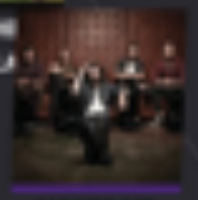
Jun 30, '07

UMBRELLA

PARTY LIKE A ROCK...


BUY U A DRANK (SH...

BIG GIRLS DON'T CRY


MAKES ME WONDER

#1 2 3 4 5

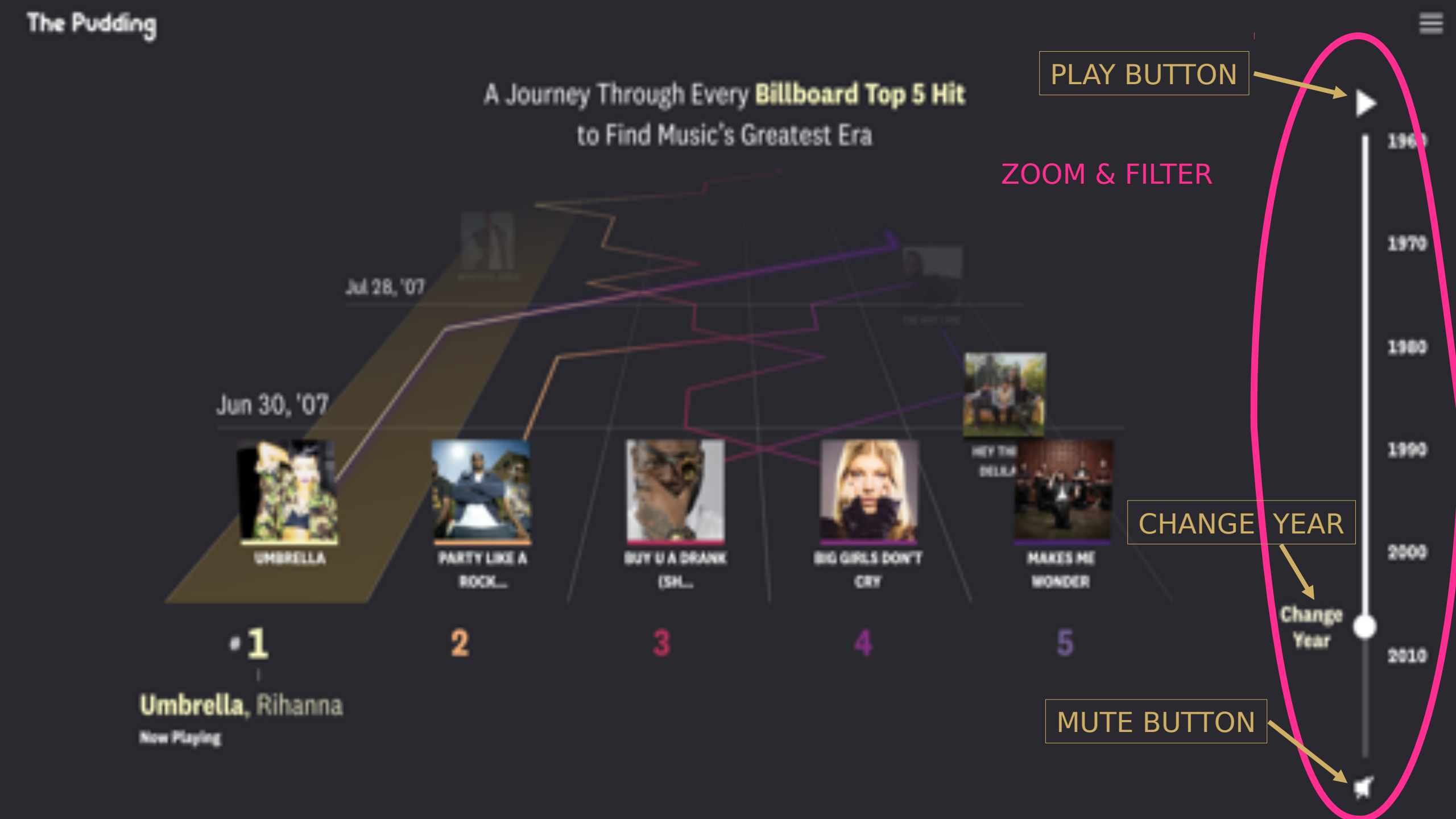
TOP 5 HITS

Umbrella, Rihanna

Now Playing

Change Year

1960 1970 1980 1990 2000 2010


The Pudding
A Journey Through Every Billboard Top 5 Hit
to Find Music's Greatest Era
PLAY BUTTON
ZOOM & FILTER
CHANGE YEAR
MUTE BUTTON
Change Year
1960
1970
1980
1990
2000
2010
Jul 28, '07
Jun 30, '07
UMBRELLA
PARTY LIKE A ROCK...
BUY U A DRANK (SH...
BIG GIRLS DON'T CRY
MAKES ME WONDER
#1
2
3
4
5
Umbrella, Rihanna
Now Playing

The Pudding

A Journey Through Every **Billboard Top 5 Hit** to Find Music's Greatest Era

1960
1970
1980
1990
2000
2010
Change Year

DETAILS ON DEMAND

Umbrella, Rihanna
Now Playing

SONG TITLE & ARTIST

This viz is the best because...

... it respects Shneiderman’s mantra

... the content is simple yet accurate & consistent

... the form provides an immediate understanding thanks to

- 2 senses (hearing & vision)
- harmonious use of colors and shapes
- user-friendly tools (play & mute buttons, time slider)

Thank you for your attention & vote for me !

请给我投票 ！

Vis #49

https://youtu.be/9kLL-Pk__vk

MSBD5005

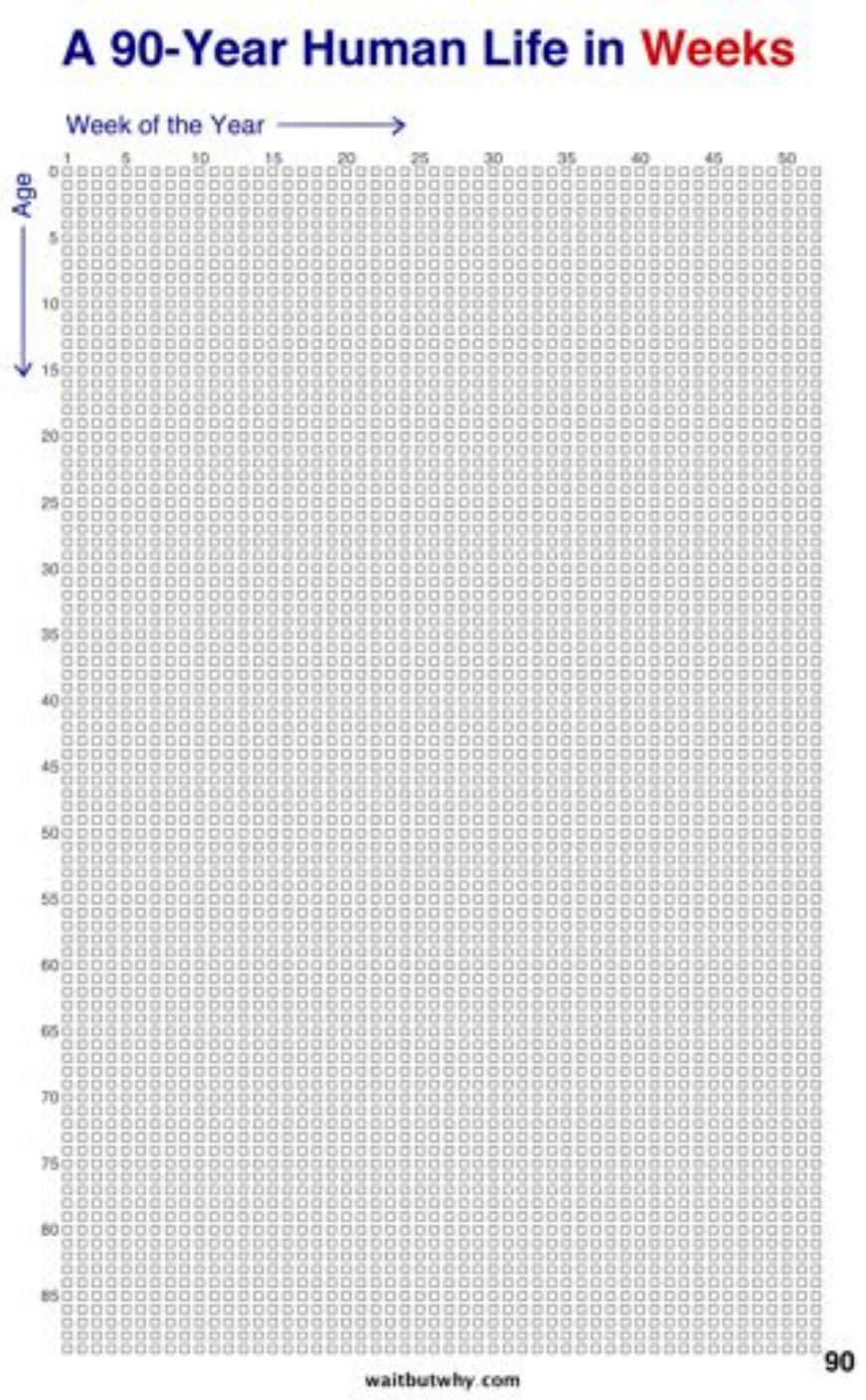
Derek Seow

THE TAIL END

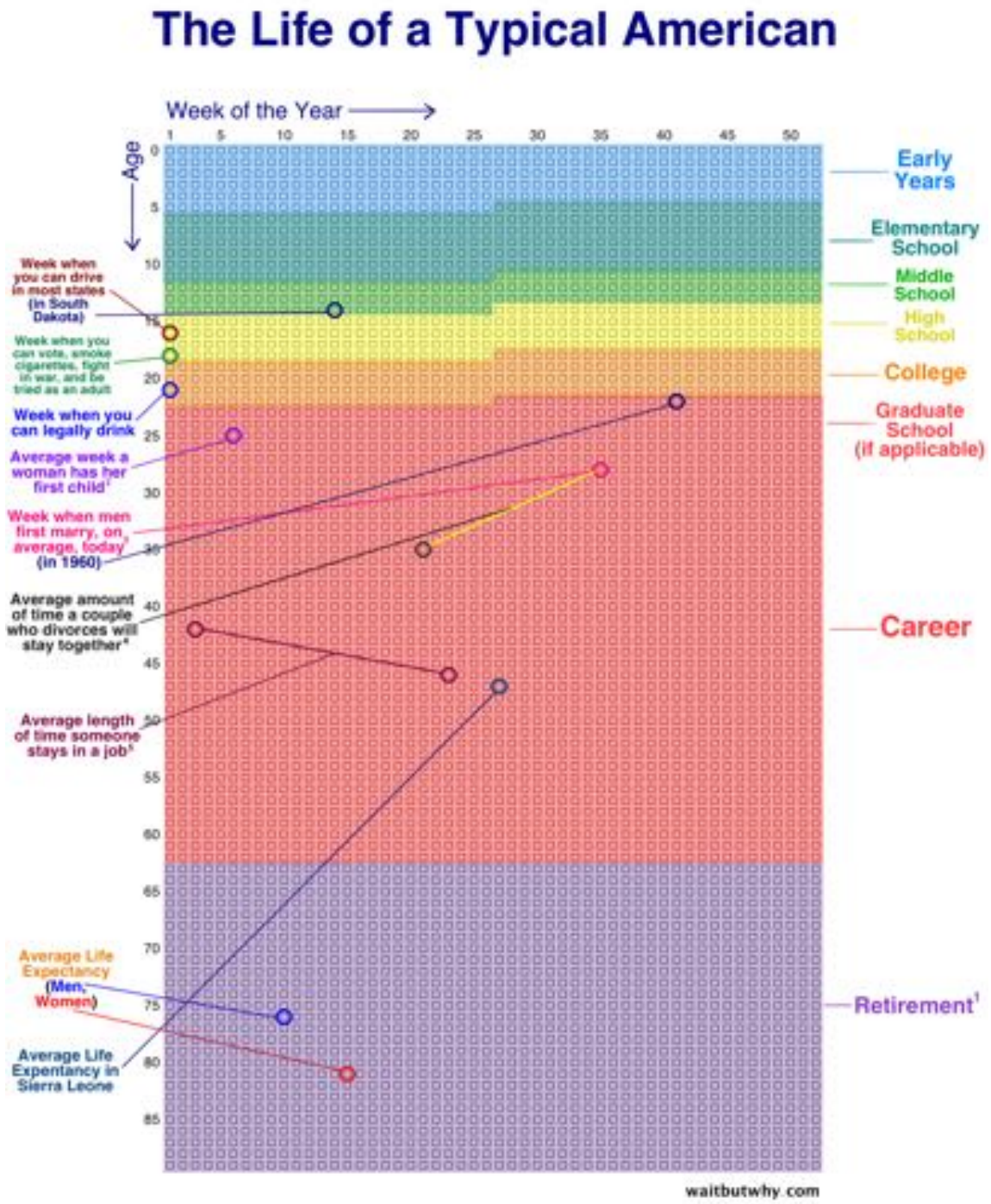
- Map out the human lifespan
- Assumption: Average life expectancy is 90 years old

DATA VISUALIZATION

- Horizontally: Each square represents a week
- Vertically: Each square represents a year

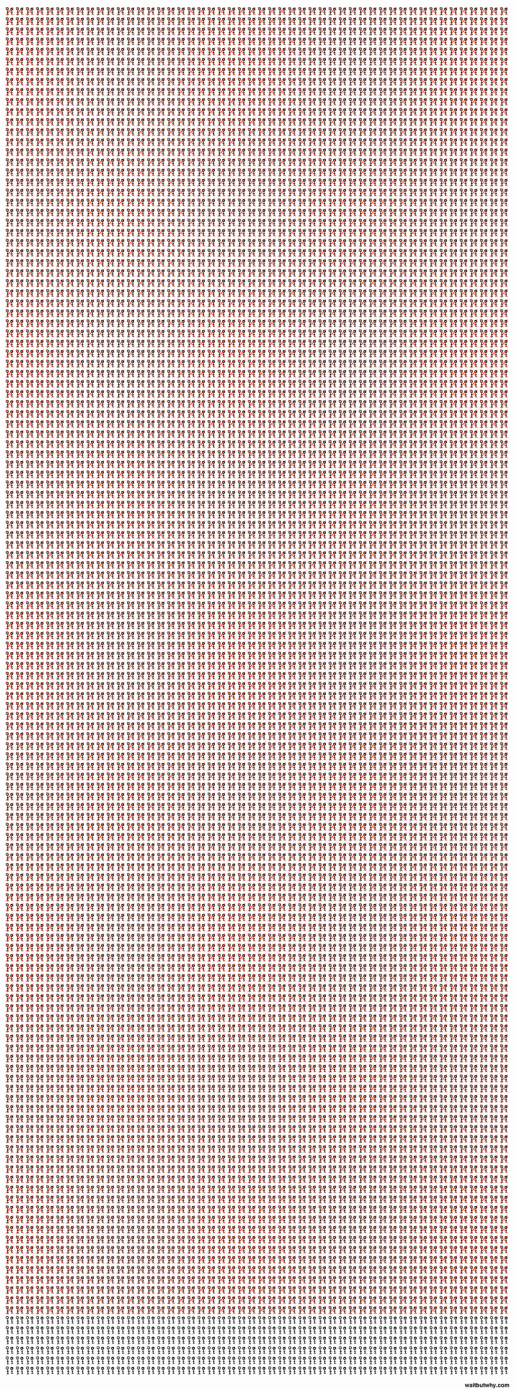


ADDING PERSPECTIVE …



RELATIONSHIP STATISTICS

- In this example: Parents are in their mid-60s
- Until the age of 18, you see them almost every day
- Now, on average you see your parents 10 days/year
- Assume they live for another 30 years ~ 300 days



Vis #50

https://www.youtube.com/watch?v=_DRA8G0ou3E

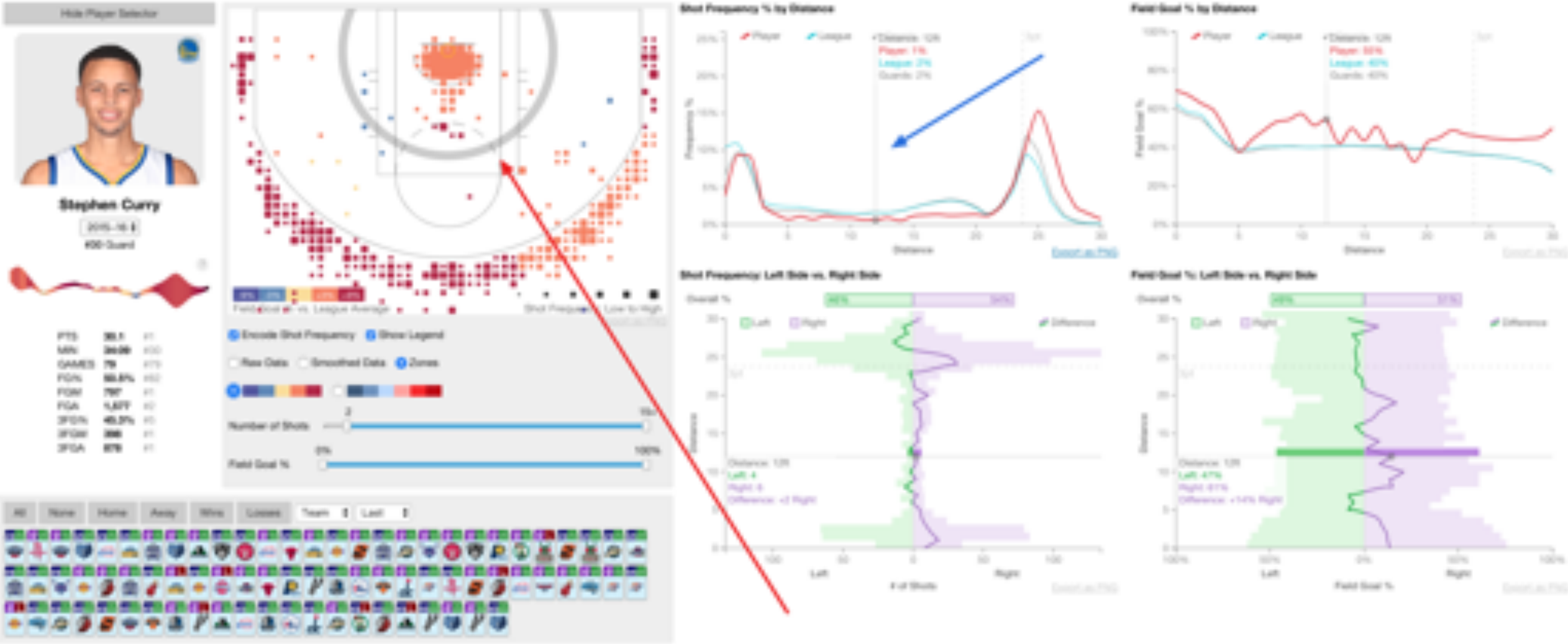
NBA Players Data Visualization

Shen, Shaohong 20655796

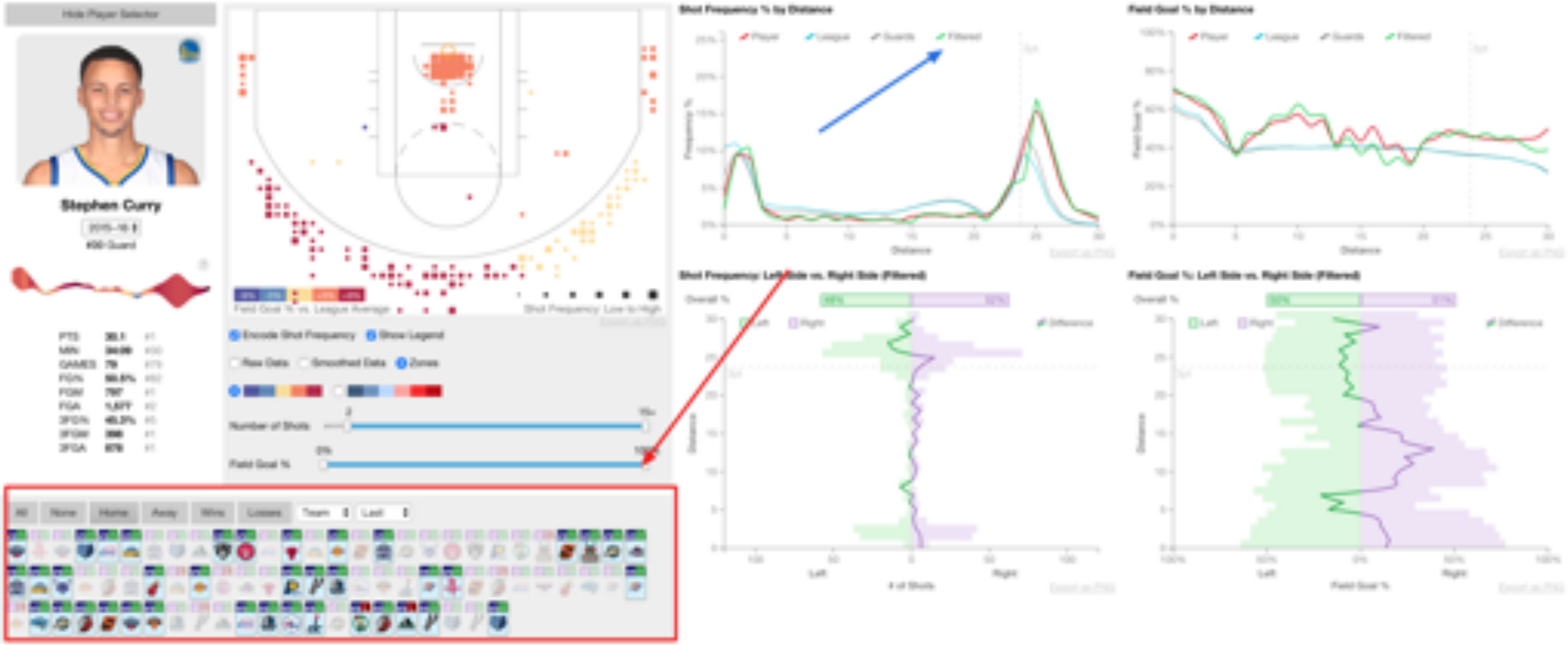
Buckets.

Visualization Overview

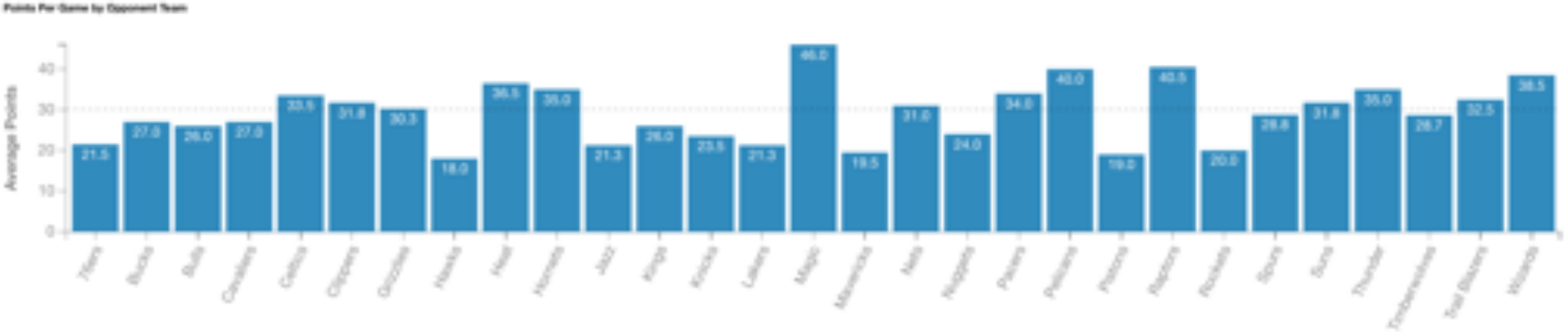
User-friendly Interface: Distance

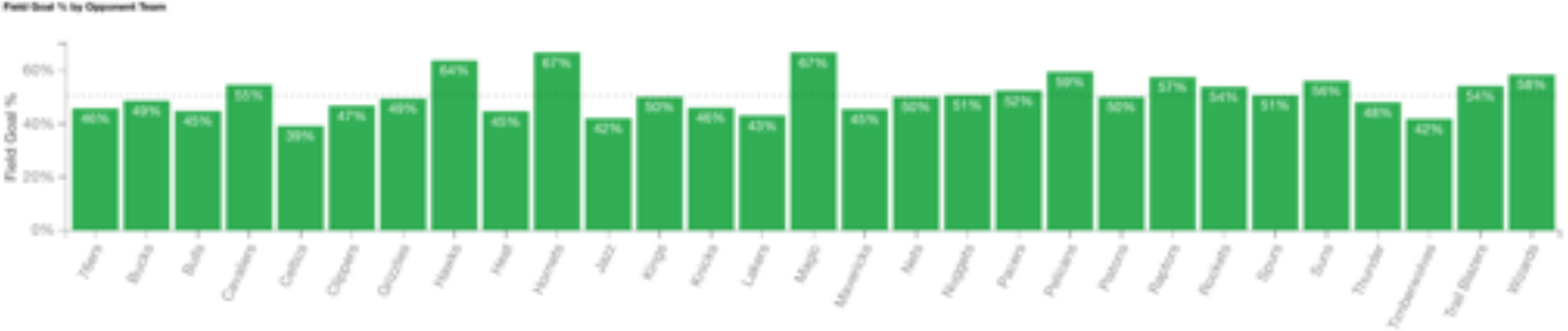


User-friendly Interface: Choose Opponent Teams

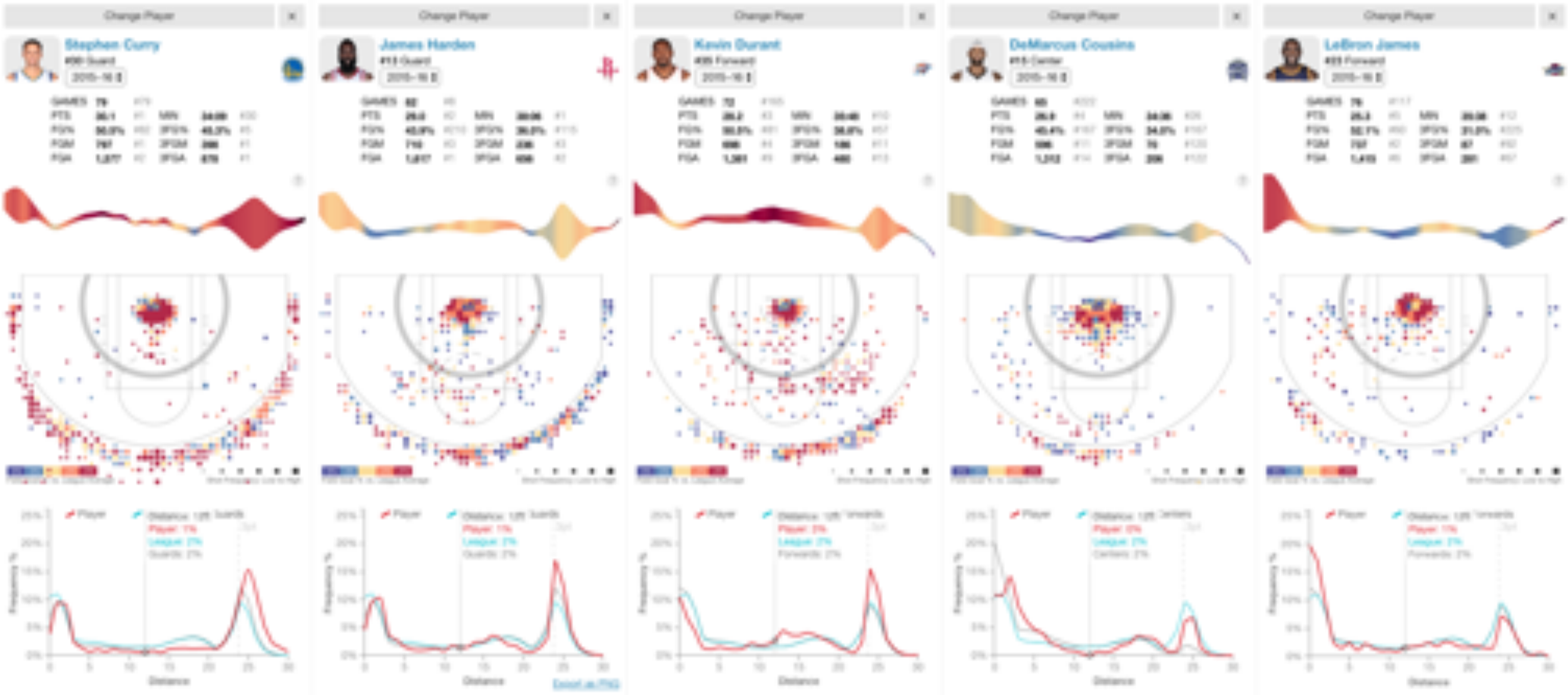


Point & Field Rate Distribution

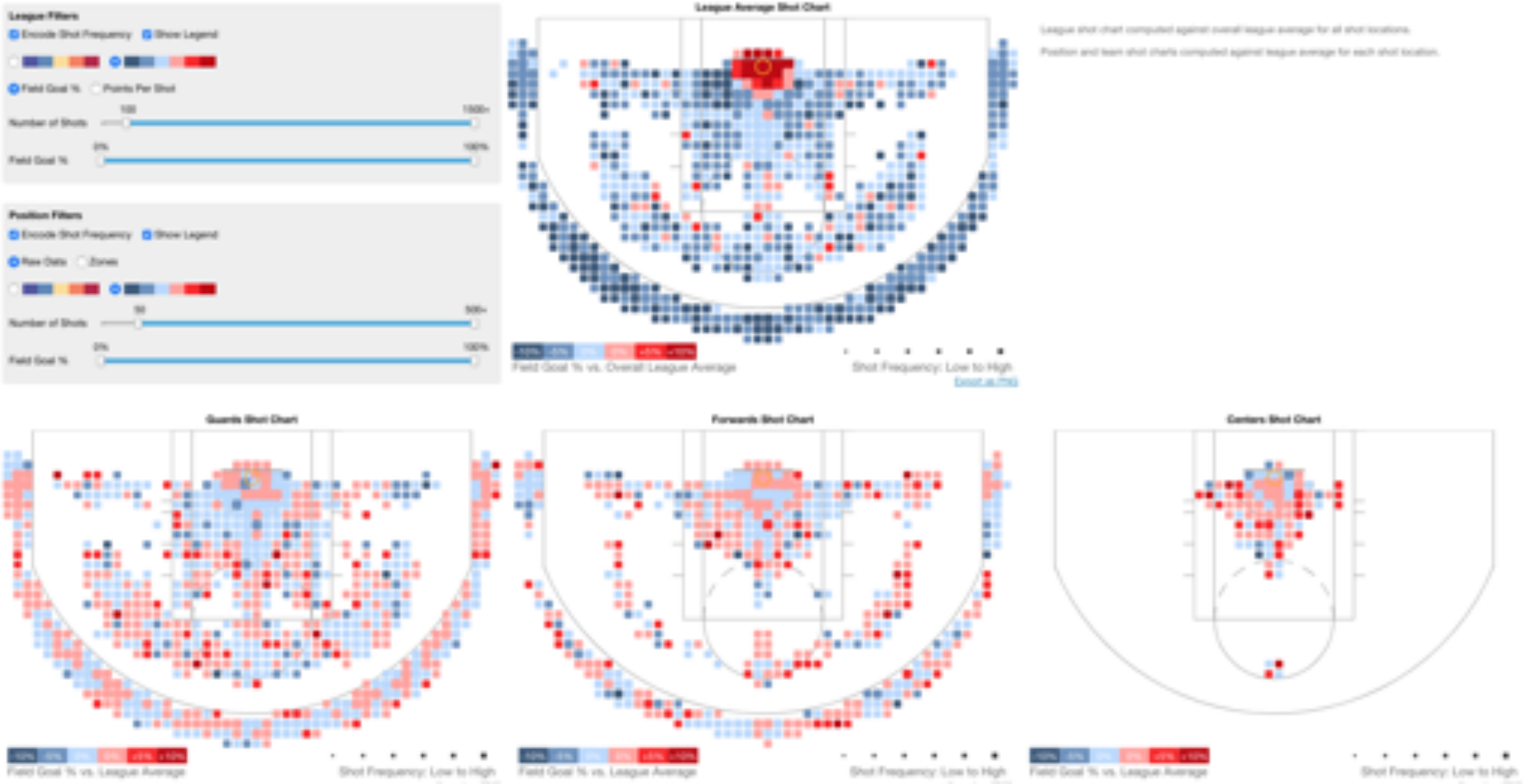




Compare


Change Player
Stephen Curry
James Harden
Kevin Durant
DeMarcus Cousins
LeBron James

The Whole League Data



Vis #51

https://www.youtube.com/watch?v=fECRMbZv6AI

MSBD 5005

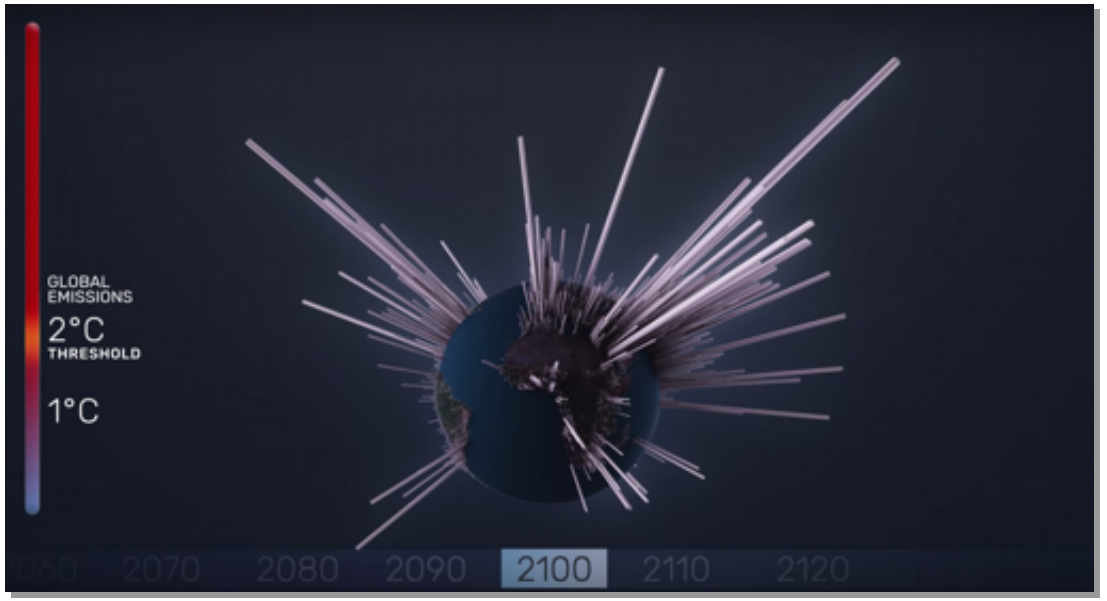
TOP VIS COMPETITION

A BRIEF HISTORY OF CO2 EMISSIONS

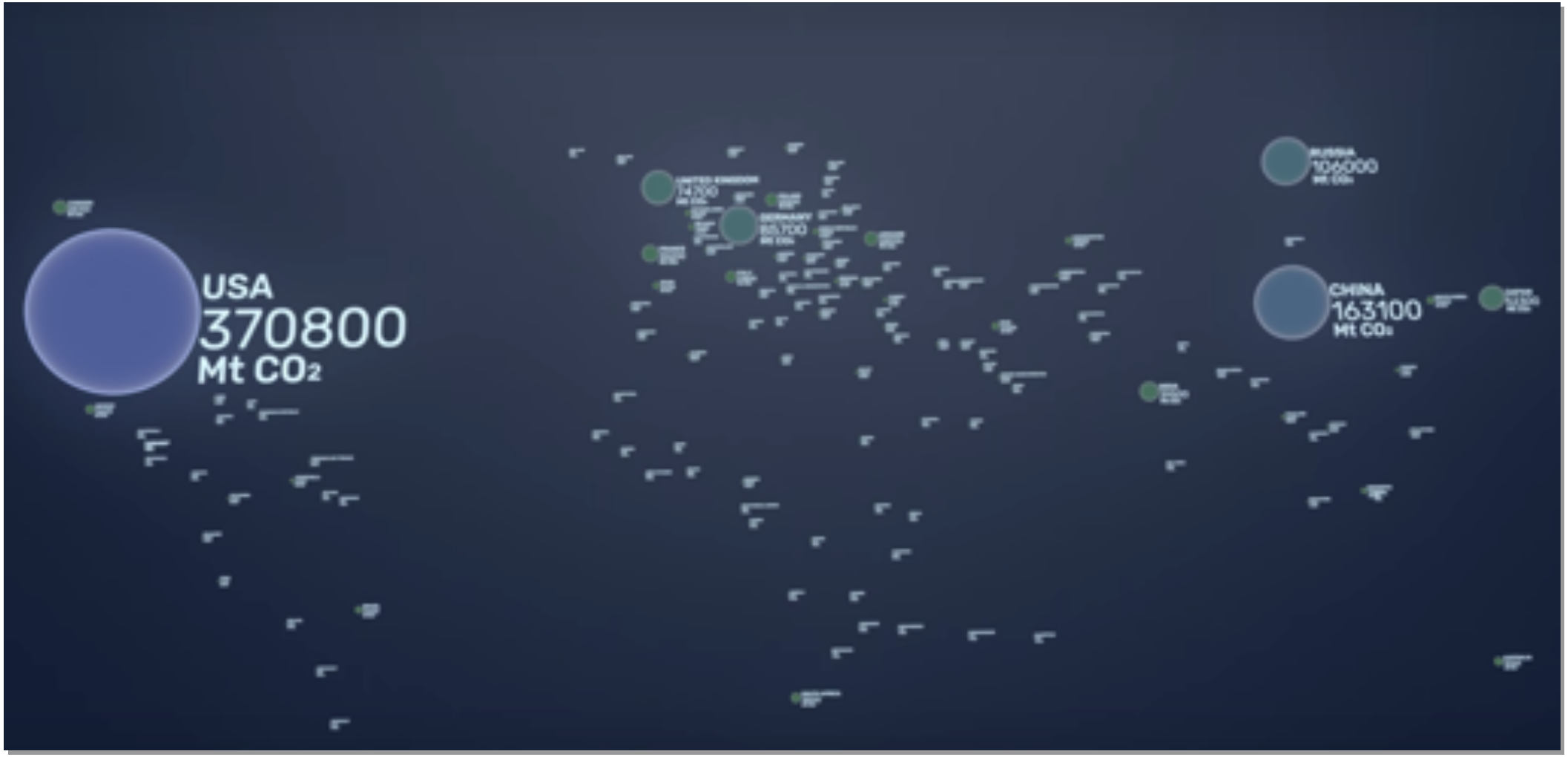
YUMI SHIN (YSHINAA)

[Back Up - 1]

GLOBAL
EMISSIONS
270366
Mt CO₂
3621
Megatons CO₂
NEW YORK AREA
1930
1940
1960
1970


GLOBAL
EMISSIONS
2°C
THRESHOLD
1°C
2070
2080
2090
2100
2110
2120

[Back Up - 2]



THANK YOU

RESOURCES:

A film by the University of Applied Sciences Potsdam (FHP) and the Potsdam Institute for Climate Impact Research (PIK)
https://www.youtube.com/watch?v=EQ7S0D1iucY

Vis #52

https://youtu.be/HkwEsXurPGo

SU
Ran

CARDCAPTOR SAKURA
SU

INNER RELATIONSHIPS

The **size of an arc** represents the number of chapters that character appears in

Kaho and Toya used to date for a few years

Chloé and Fujitaka are both reincarnations of the magician Clow Reed

Line color meaning

- These love each other
- A one-sided crush
- Master and Guardian
- Family
- Best friends
- Unusual

Yukito is the temporary form of Yue, a Guardian of the Clow Cards. Yukito however initially doesn't know he's not human

Sonomi sees Fujitaka as her rival, because he married her cousin (and her lover) Nadeshiko

COLOR CLUSTERS

The pixels of each chapter's cover image are grouped into 3 - 10 main colors

The best-matching number of groups has been manually determined for each cover

The **size of each circle** represents the percentage of the cover image that is captured in that color

All circles from one chapter cluster together add up to 100%

MAIN CHARACTERS

Sakura Kinomoto
The main character and master of the Clow Cards

Toya Kinomoto
Sakura's bigger brother, also has magical powers

Fujitaka Kinomoto
Sakura's father, an archeology professor

Nadeshiko Kinomoto
Sakura's mother, who died when Sakura was only 3

Tomoyo Daidouji
Sakura's best friend. Makes Sakura's outfits

Sonomi Daidouji
Mother of Tomoyo and cousin of Nadeshiko

Kero
A Guardian of the Clow Cards. Sun based

Yukito Tsukishiro
Toya's best friend/love. Yue's temporary form

Yue
A Guardian of the Clow cards. Moon based

Syaoran Li
A distant relative of Clow Reed. Sakura's rival at first

Kaho Mizuki
Sakura's substitute Math teacher & friend

Eriol Hiiragizawa
Sakura's friend and main "antagonist" of the 2nd arc

Spinel Sun
One of Eriol's Guardians. The counterpart of Kero

Ruby Moon
One of Eriol's Guardians. The counterpart of Yue

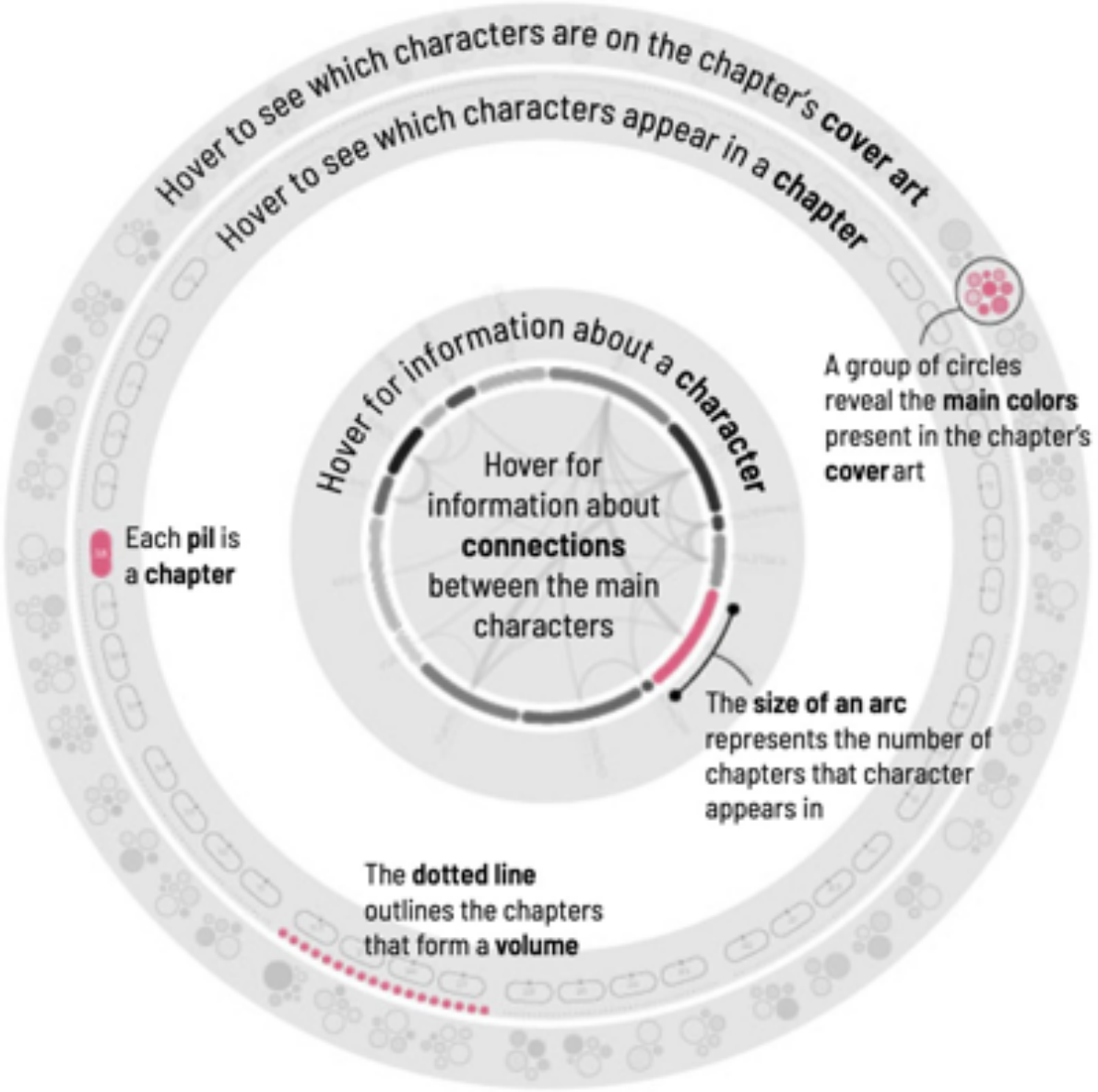
Classmates
Naoko, Rika, Chiharu and Yamazaki

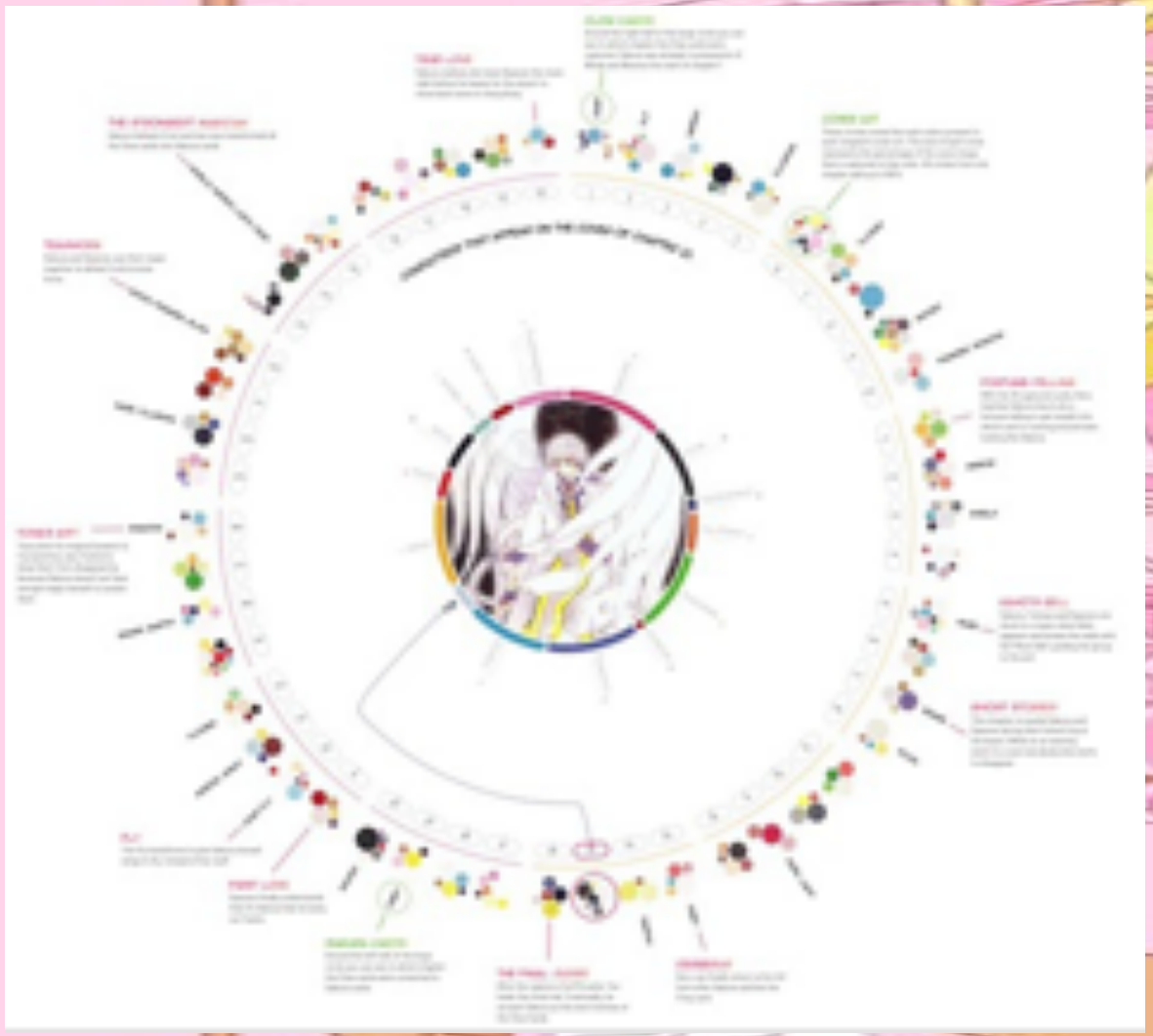
Normal human

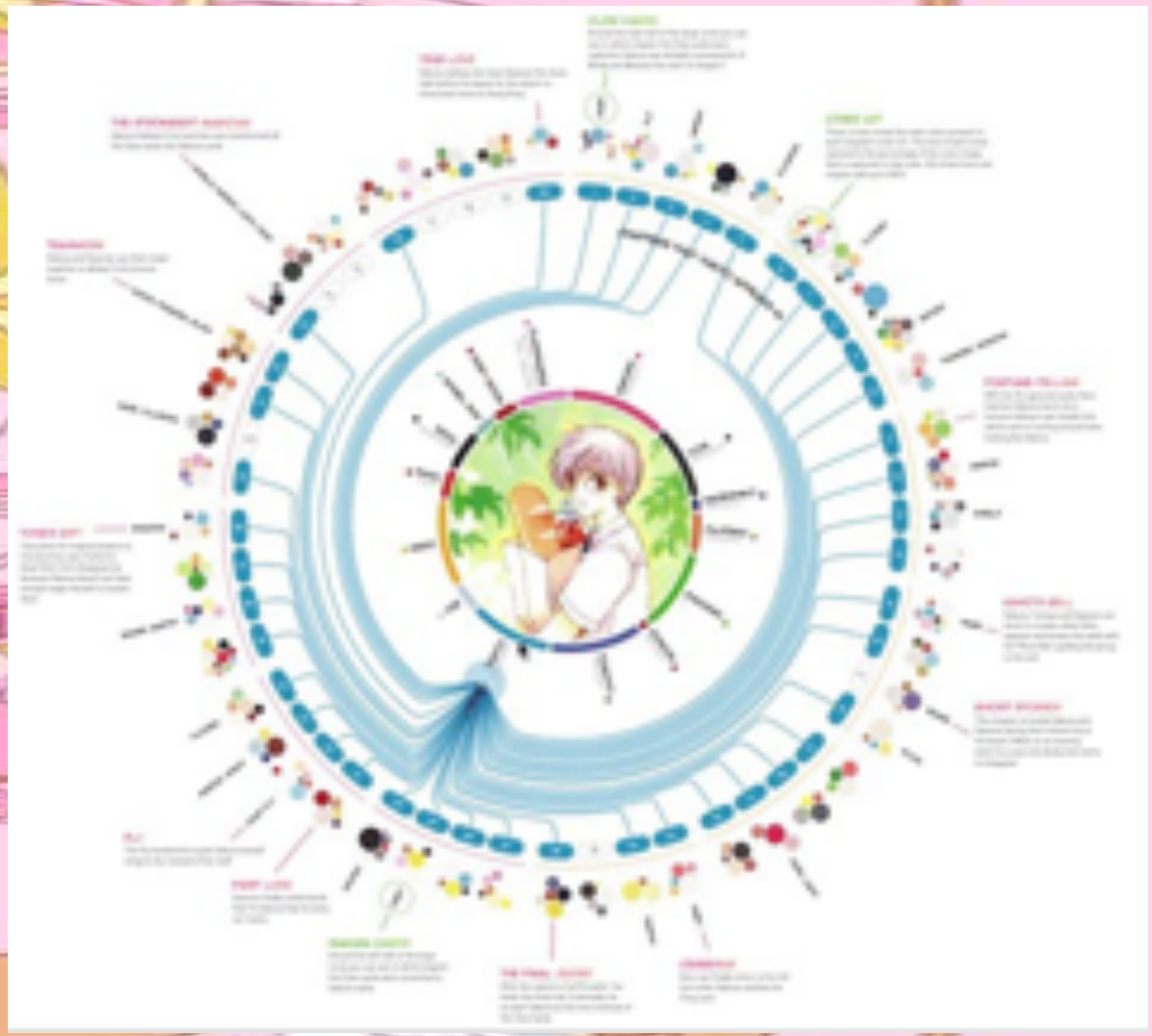
Human with magical powers

Magical being

Reincarnation of Clow Reed


Hover to see which characters are on the chapter's **cover art**
Hover to see which characters appear in a **chapter**
Hover for information about a **character**
Hover for information about **connections** between the main characters
A group of circles reveal the **main colors** present in the chapter's **cover** art
Each **pil** is a **chapter**
The **size of an arc** represents the number of chapters that character appears in
The **dotted line** outlines the chapters that form a **volume**





SAKURA

Thank You

Vis #53

https://youtu.be/vqnXS4pUkao

Tang Huimin

A who's who guide to the

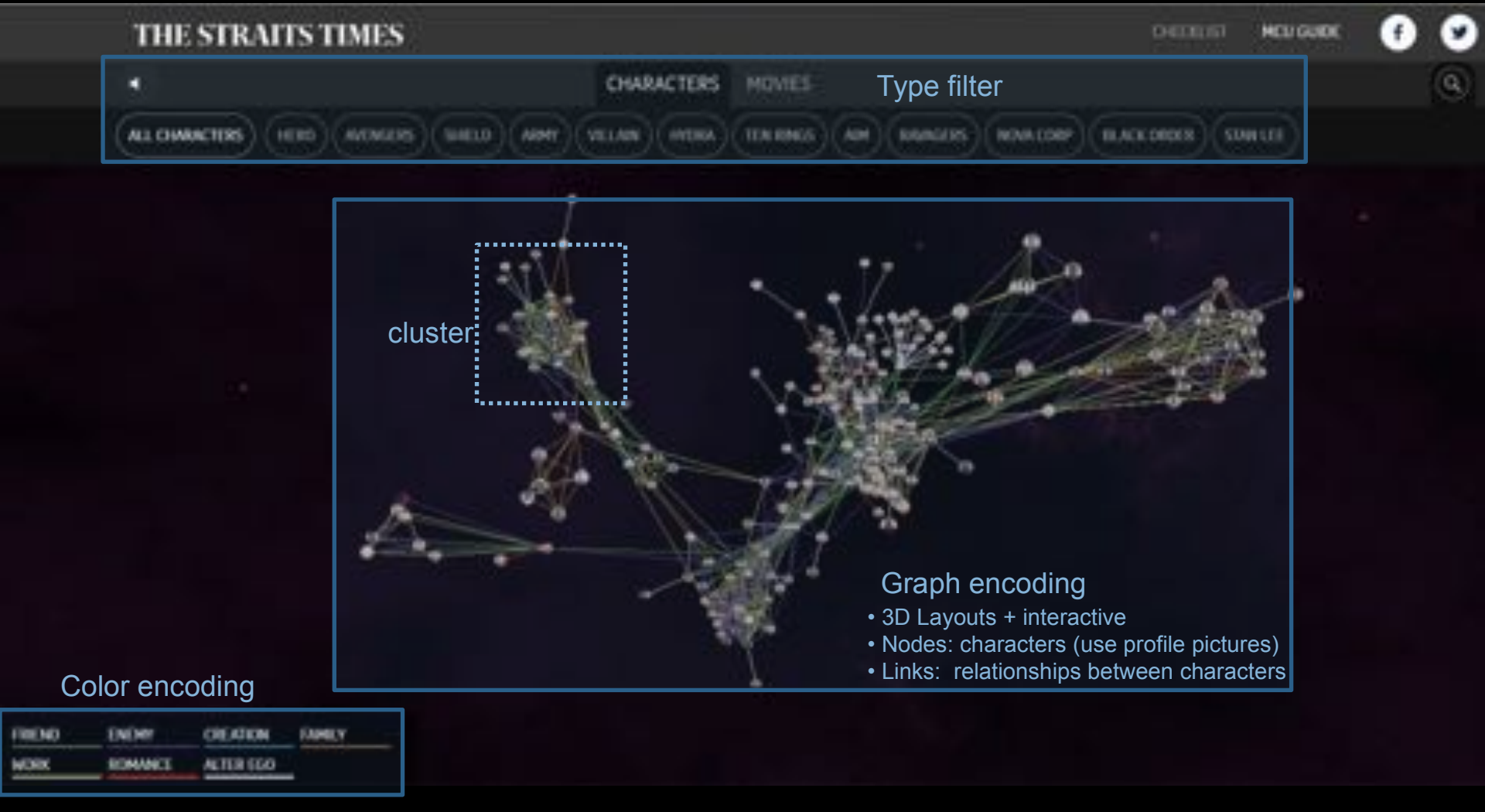
Marvel Cinematic Universe

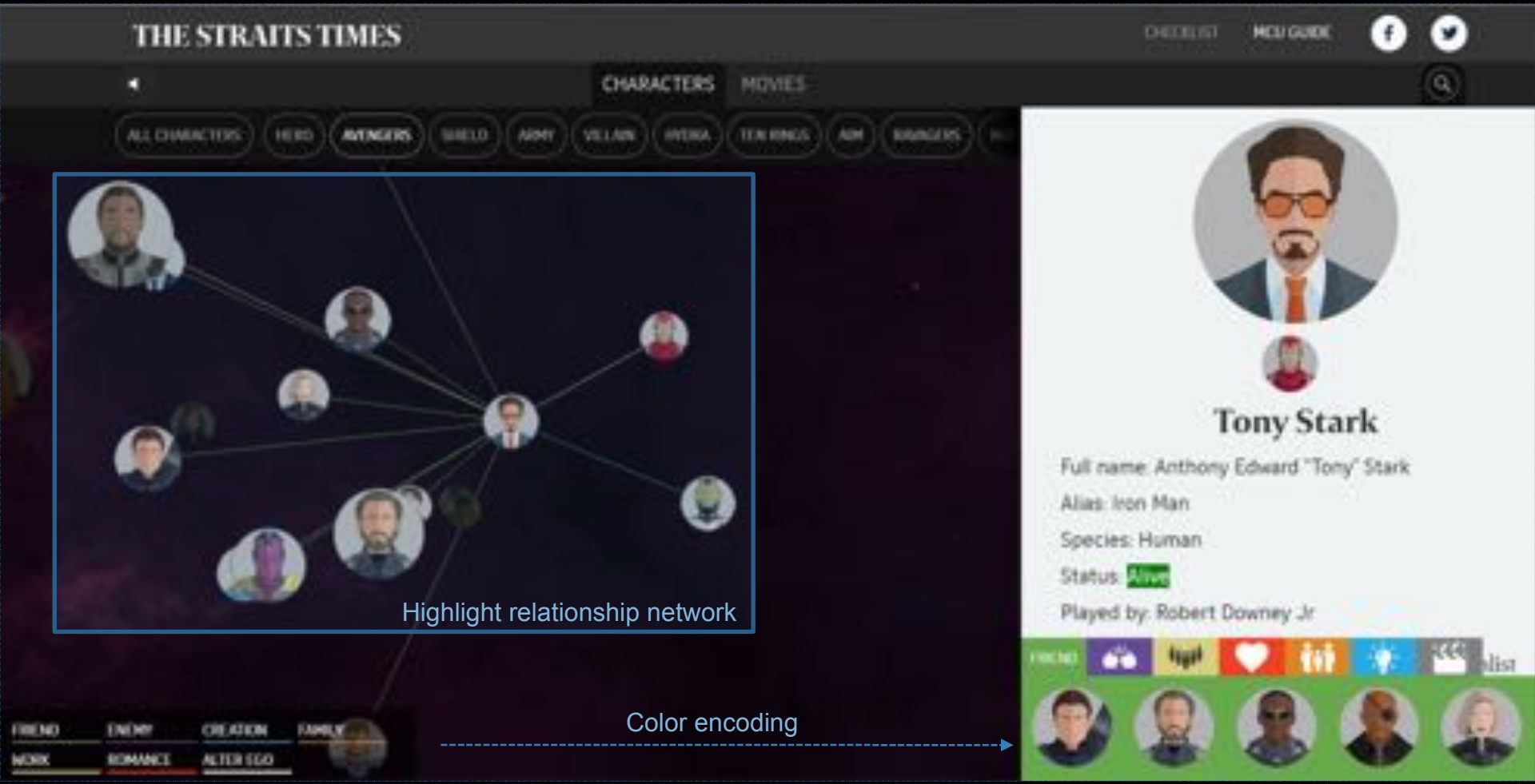
As Avengers assemble with characters from all corners of the Marvel universe, this graphic will tell you who fights whom, who has a hellish sister, and more.

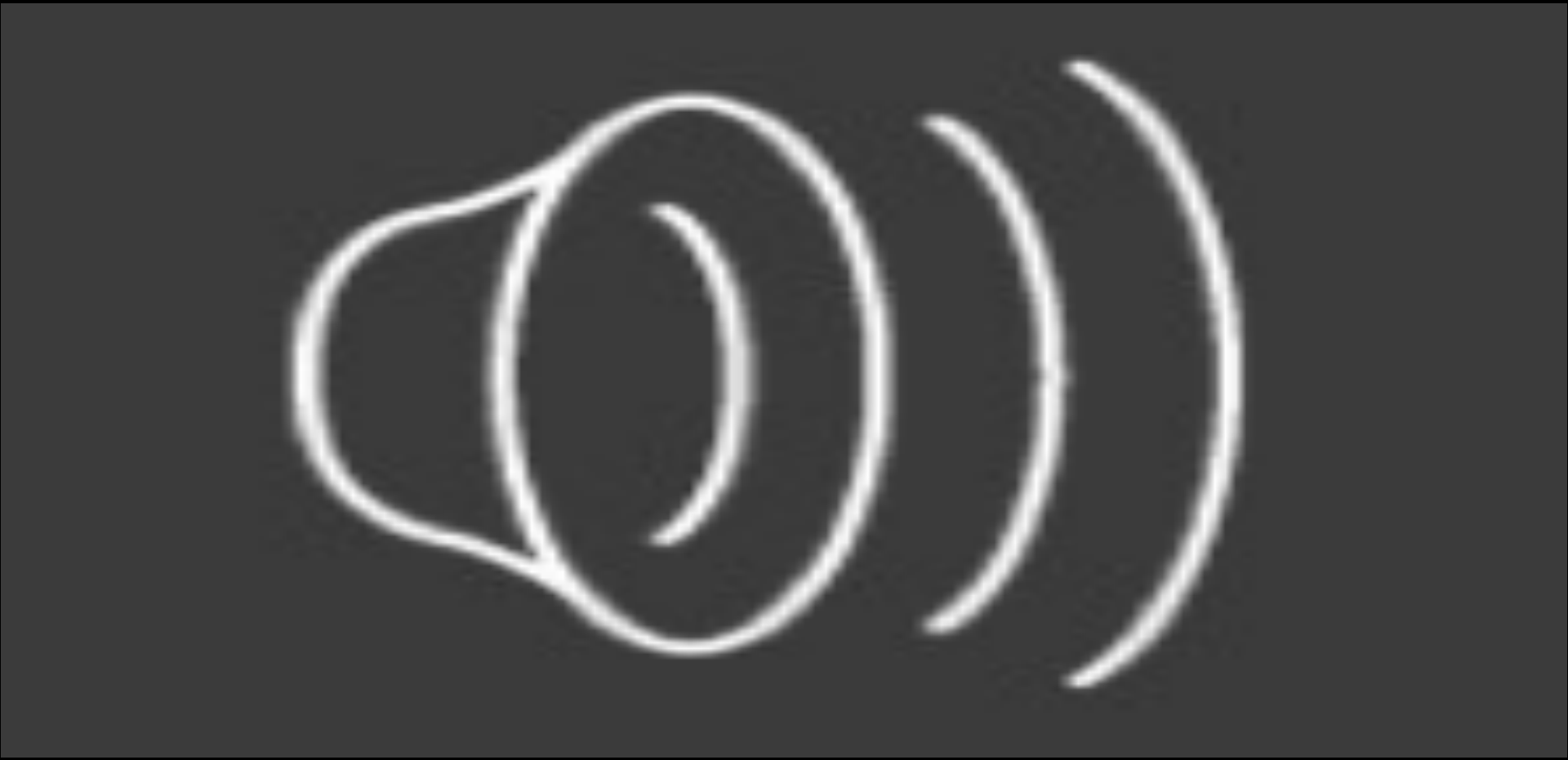
PUBLISHED APRIL 24, 2018

Produced by Tay Tzu Chek, Ian Xun, and Donna Ong

START


THE STRAITS TIMES
CHARACTERS
MOVIES
Type filter
cluster
Graph encoding
• 3D Layouts + interactive
• Nodes: characters (use profile pictures)
• Links: relationships between characters
Color encoding
FRIEND
ENEMY
CREATION
FAMILY
WORK
ROMANCE
ALTER EGO


THE STRAITS TIMES
CHARACTERS
MOVIES
Highlight relationship network
Color encoding
Tony Stark
Full name: Anthony Edward "Tony" Stark
Alias: Iron Man
Species: Human
Status: Alive
Played by: Robert Downey Jr



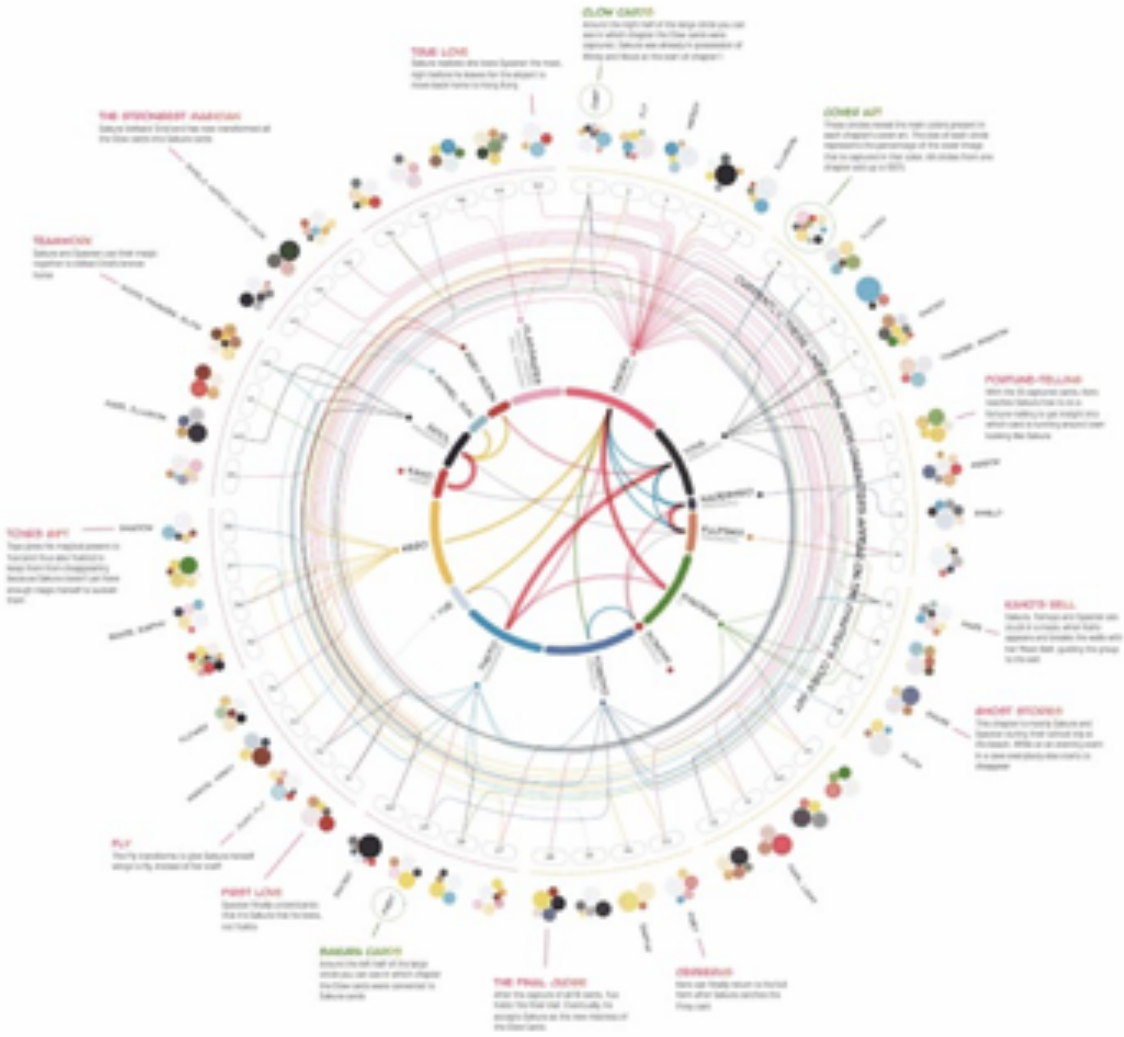
Vis #54

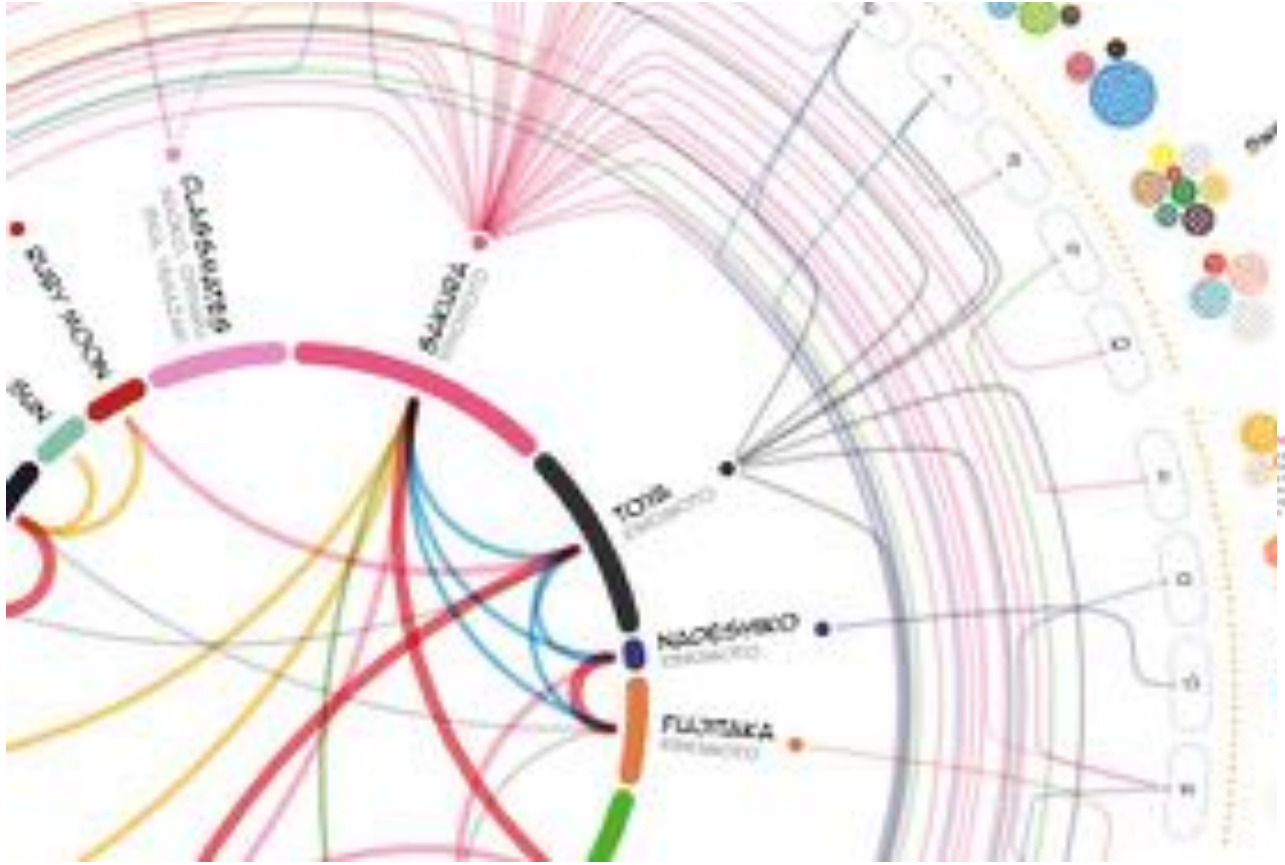
https://youtu.be/eE2xdVK4oDw

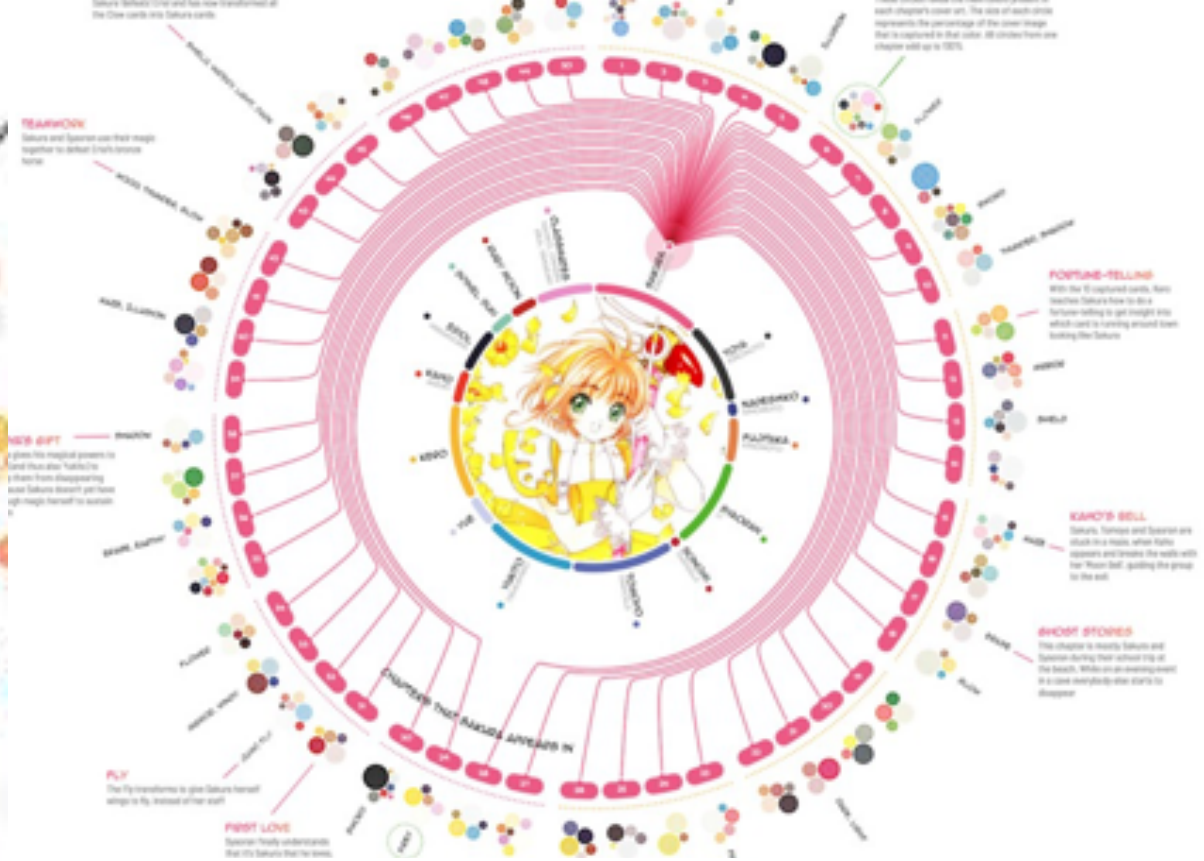
An Ode to Cardcaptor Sakura

TONG Ka Kiu Cathy

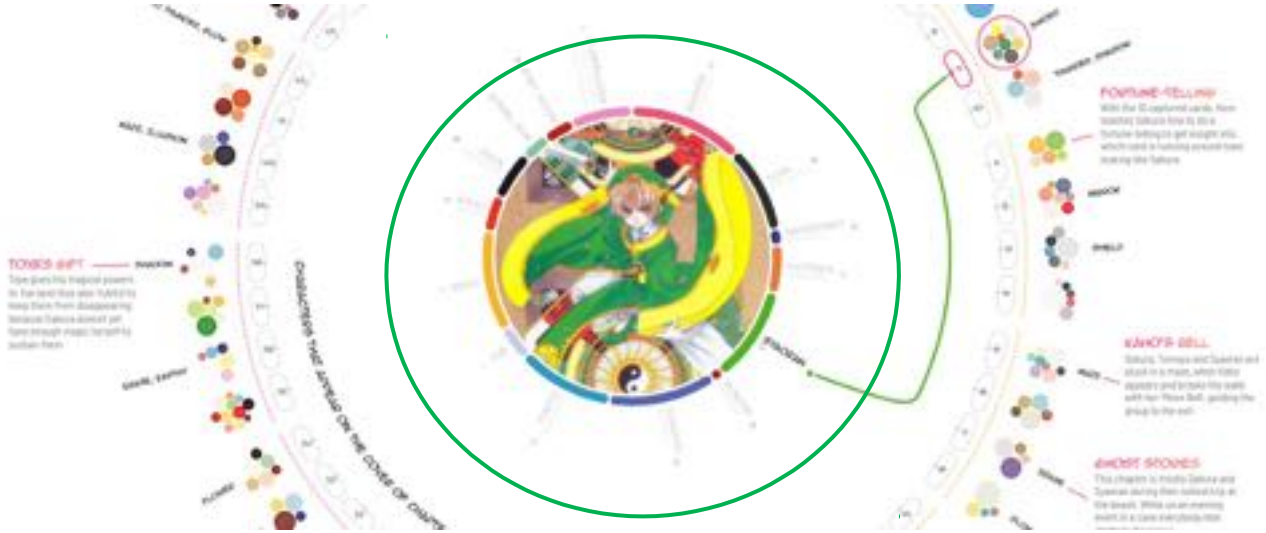
SID: 20671611


CLOW CARDS
TRUE LOVE
THE STRONGEST MAGICIAN
TRANSFORM
TOWER OF!
FLY
FIRST LOVE
RAINBOW
THE FINAL JUDGE
DEPARTURE
FORTUNE-TELLING
KAORI'S BELL
MAGIC STICKERS
LOVE LETTER
THE SWORD OF CONQUERING ANGELS OR THE SWORD OF CONQUERING ANGELS OR THE SWORD OF CONQUERING ANGELS OR

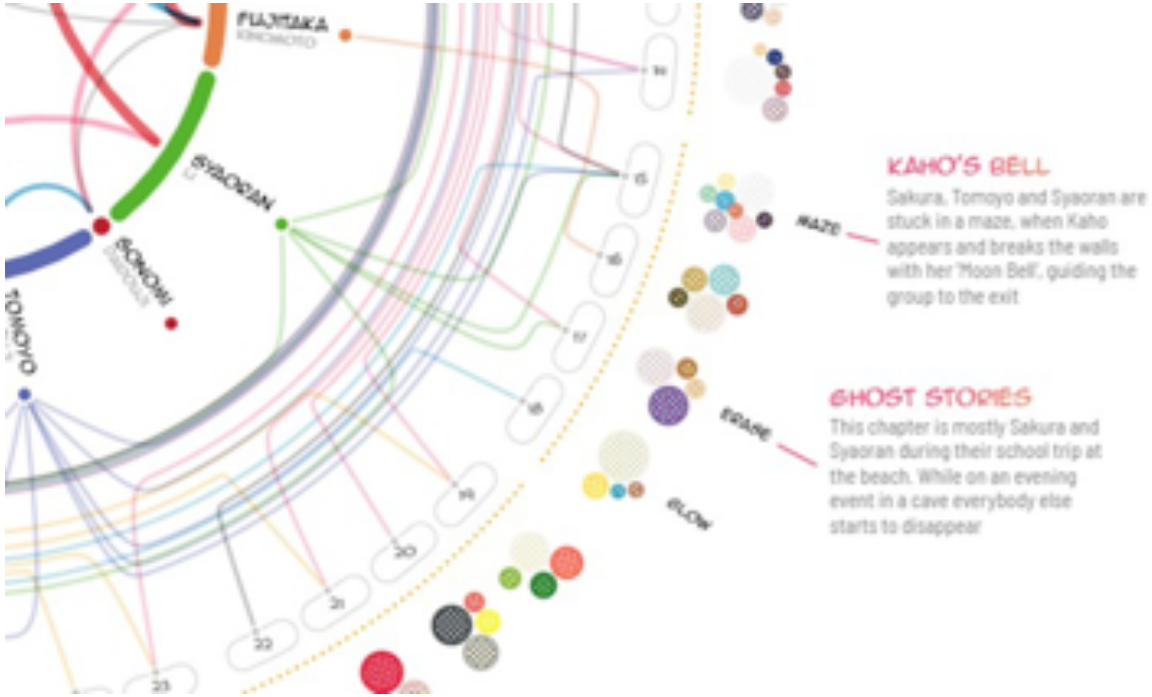




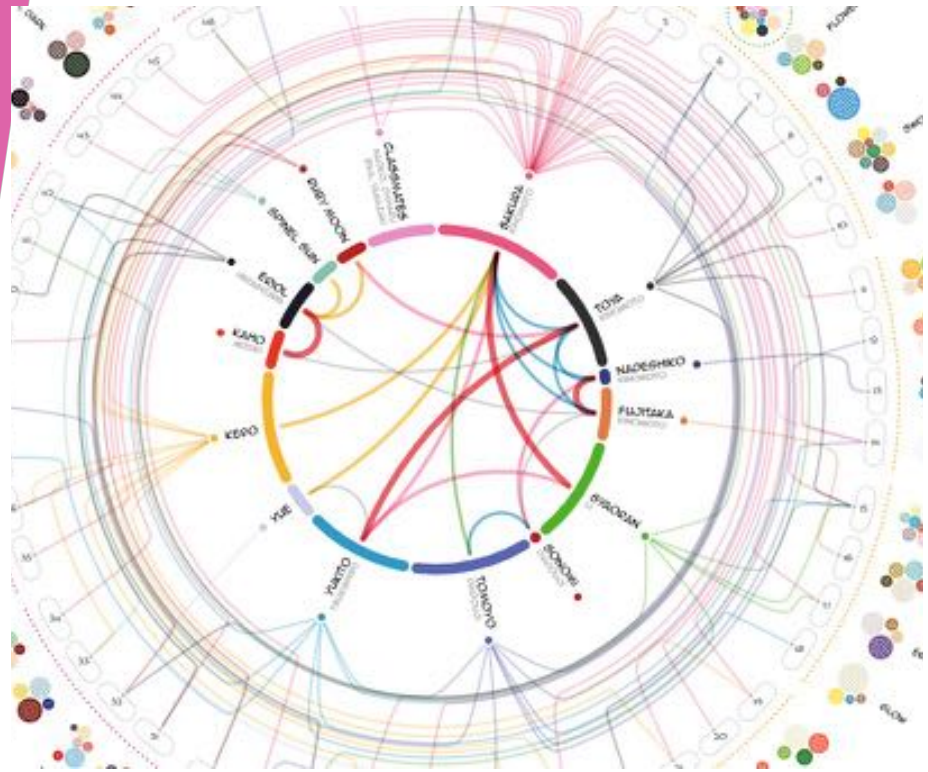
Clear Visualization
Easy to Understand



Visualizes the most attractive part of this manga


FUJITAKA
SYAORAN
KAHO
TOMOYO
MAZE
KAHO'S BELL
Sakura, Tomoyo and Syaoran are stuck in a maze, when Kaho appears and breaks the walls with her 'Moon Bell', guiding the group to the exit
FIGURE
GHOST STORIES
This chapter is mostly Sakura and Syaoran during their school trip at the beach. While on an evening event in a cave everybody else starts to disappear
GLOW

KERO
FIGURE
GLOW



Everyone can enjoy

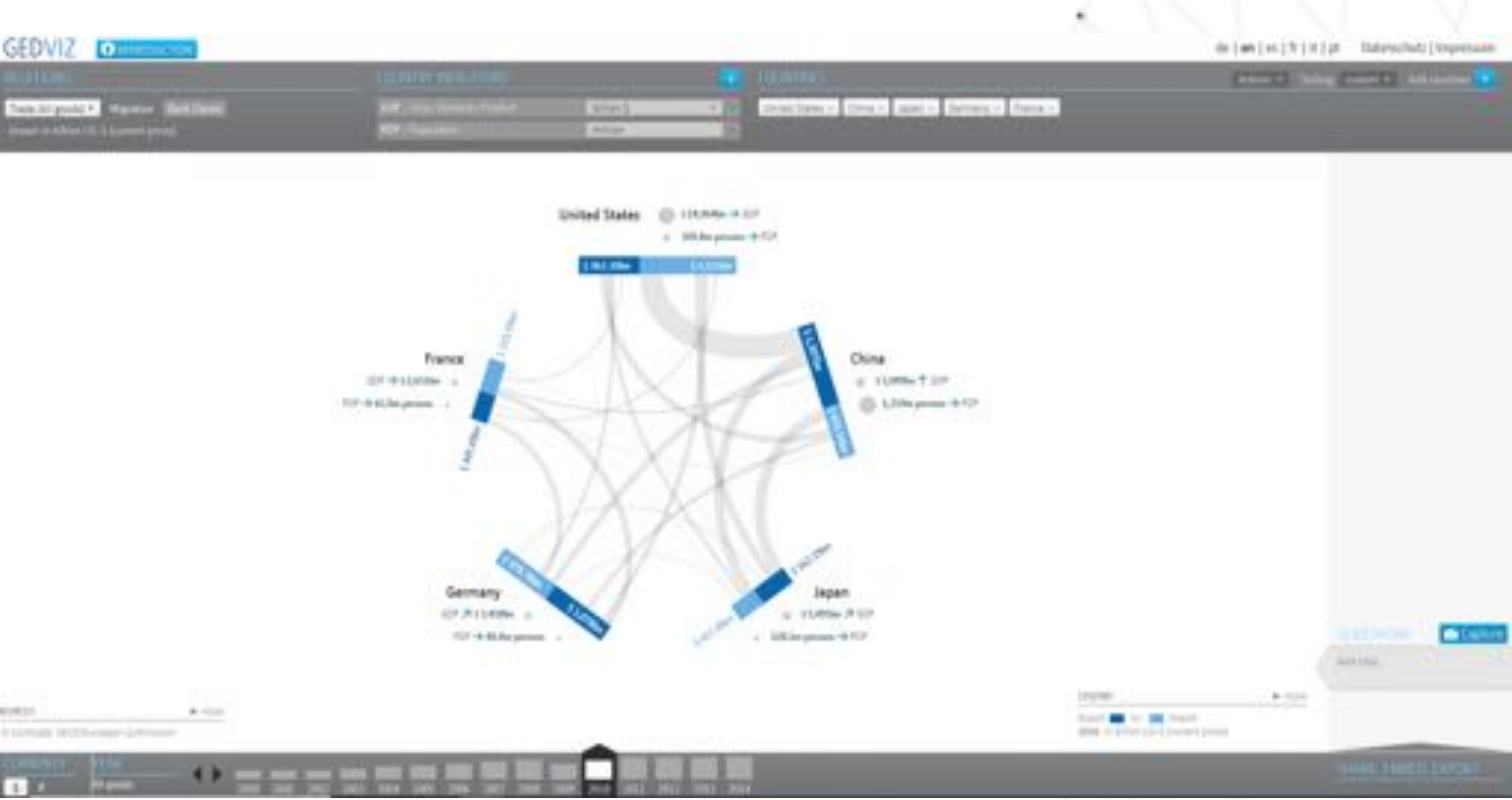
Vis #55

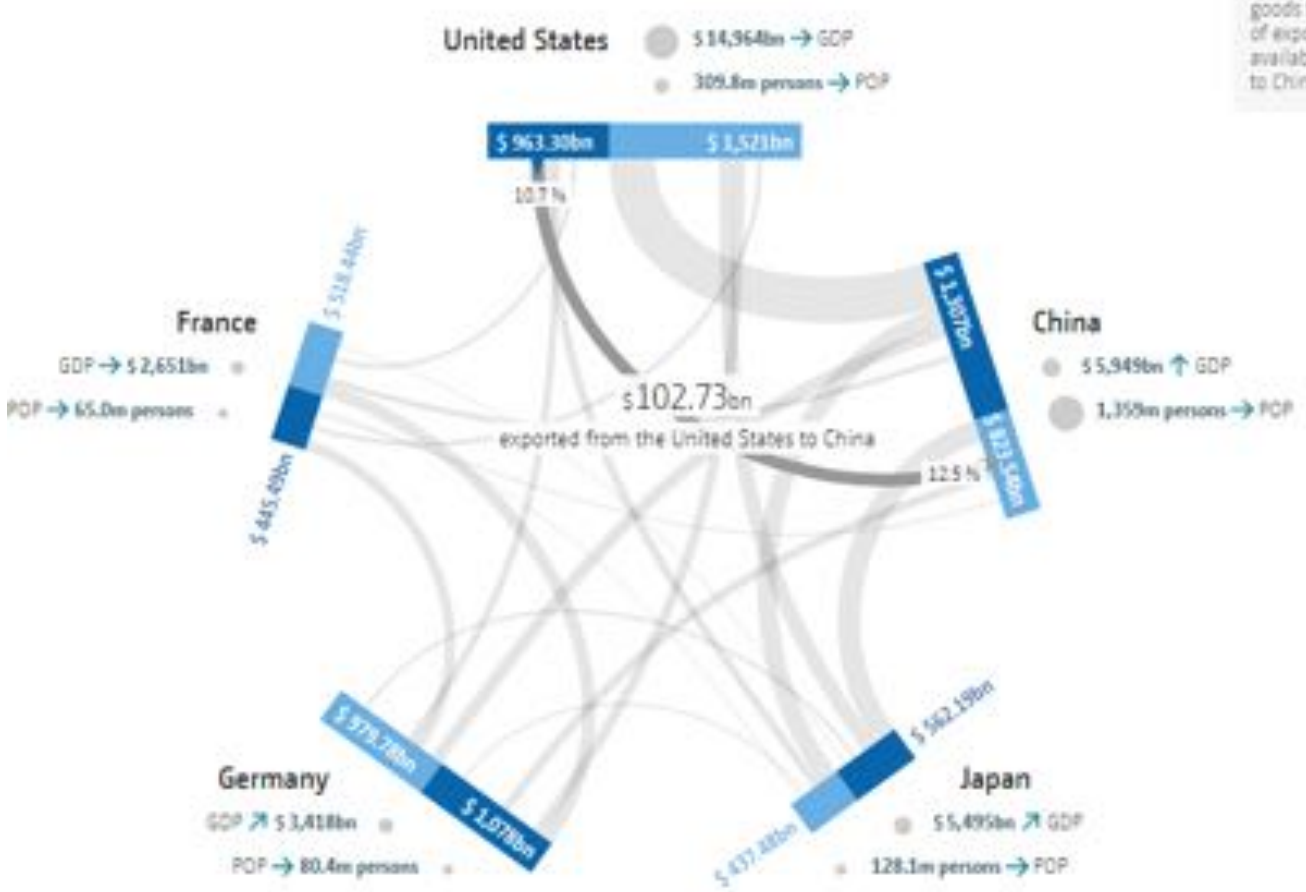
https://youtu.be/fe7yyzfPe4c

Visualization of Global economic relations

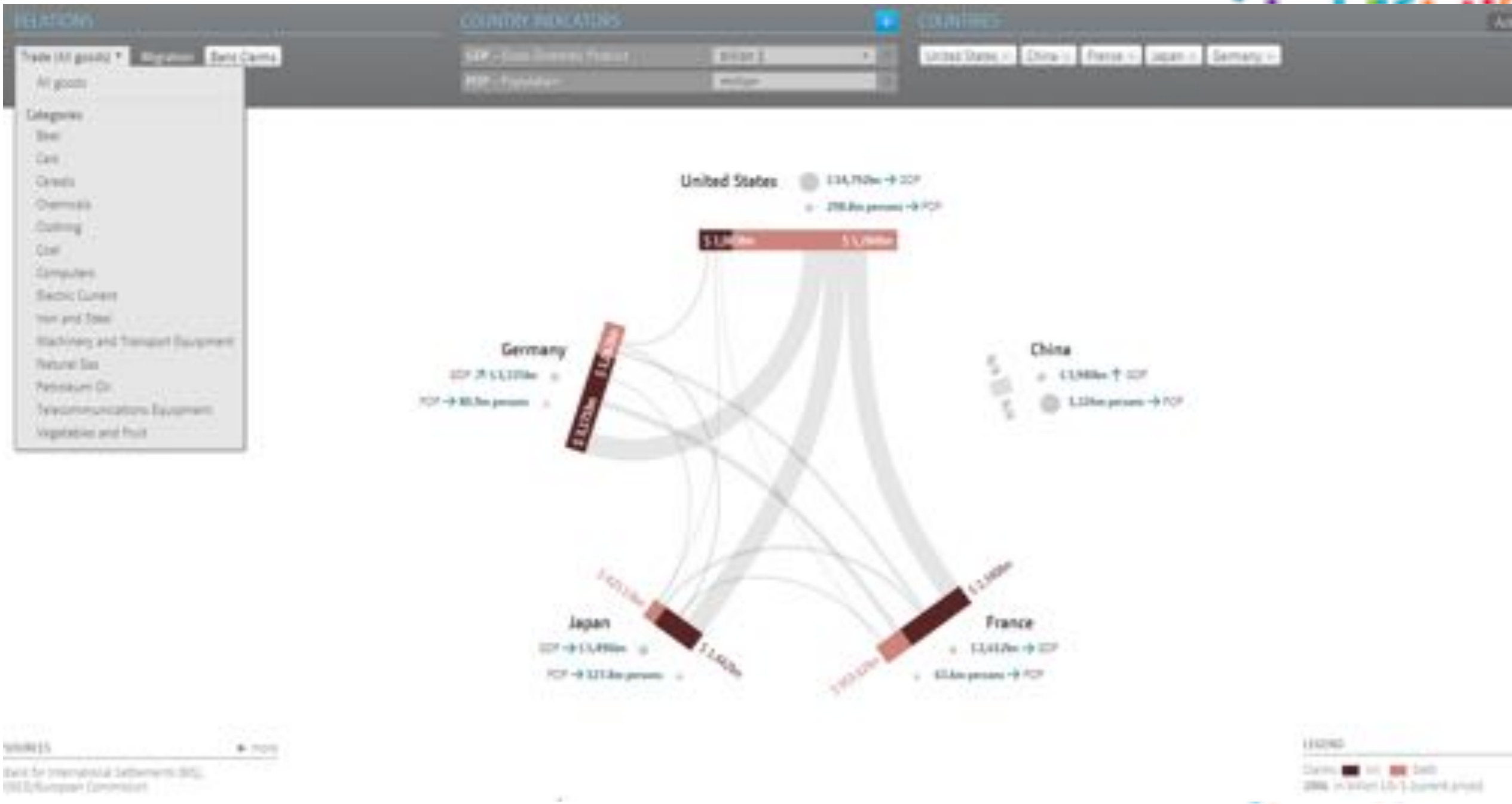
Wang Changmin

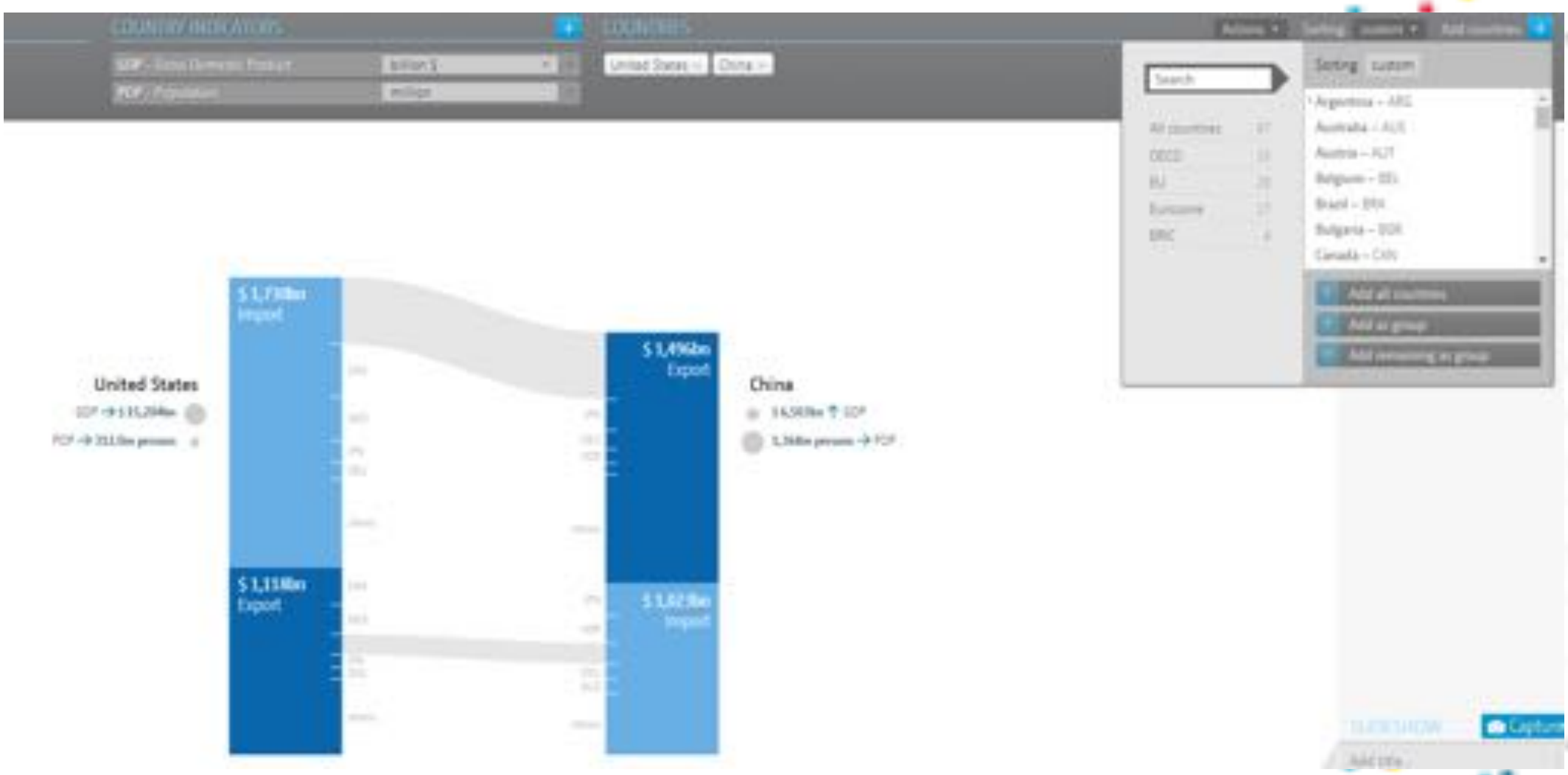
Link ： https://viz.ged-project.de/

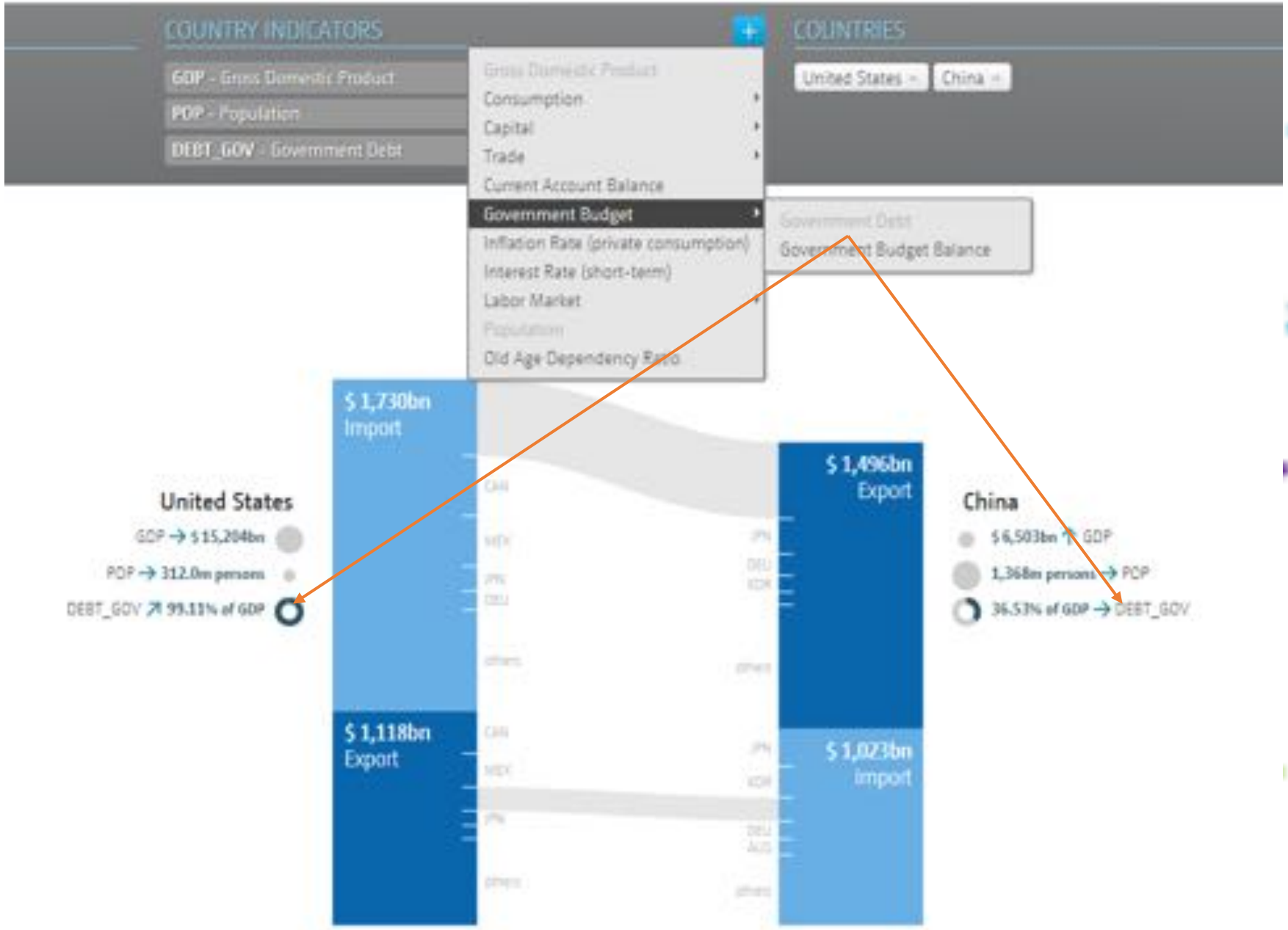

GEOVIZ
United States
France
China
Germany
Japan

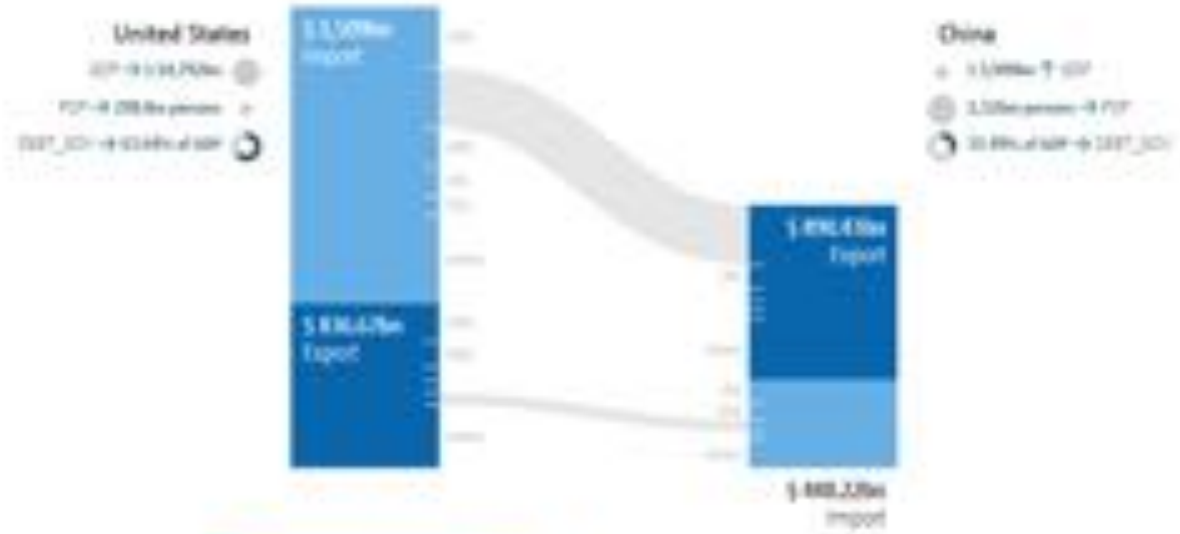


In 2010 United States exported 102.73 billion US-$ (current prices) worth of goods to China. This represented 10.70% of exports from United States in all available countries and 12.50% of imports to China from all available countries.


United States
Germany
China
Japan
France


United States
$ 1,118bn
Export
$ 1,496bn
Export
China


COUNTRY INDICATORS
GDP - Gross Domestic Product
POP - Population
DEBT_GOV - Government Debt
COUNTRIES
United States
China
Consumption
Capital
Trade
Current Account Balance
Government Budget
Inflation Rate (private consumption)
Interest Rate (short-term)
Labor Market
Old Age Dependency Ratio
Government Budget Balance
$ 1,730bn
Import
$ 1,118bn
Export
$ 1,496bn
Export
$ 1,023bn
Import
United States
GDP → $ 15,204bn
POP → 312.0m persons
DEBT_GOV ↗ 99.11% of GDP
China
$ 6,503bn ↑ GDP
1,368m persons → POP
36.53% of GDP → DEBT_GOV


United States
$ 3,345bn
import
$ 816.47bn
Export
China
$ 896.43bn
Export
$ 488.28bn
import

COUNTRY INDICATORS
GDP - Gross Domestic Product
billion $
POP - Population
million
DEBT_GOV - Government Debt
% of GDP
COUNTRIES
United States
China
United Kingdom
Spain
Actions
Sorting
custom
Select
Select all countries
Unselect all countries
Group
Group selection
Ungroup selection
Rename group
Delete
Delete selected countries
Delete all countries
Add flow related
Emigration + immigration
Emigration
immigration
United States
$ 54,750bn → GDP
258.8m persons → POP
63.64% of GDP → DEBT_GOV
Spain
GDP ↗ $ 5,417bn
POP → 44.3m persons
DEBT_GOV ↘ 98.95% of GDP
China
$ 3,940bn ↑ GDP
1,326m persons → POP
China
United Kingdom
$ 2,417bn ↗ GDP
60.6m persons → POP
82.45% of GDP → DEBT_GOV

United States
$ 14,752bn → GDP
298.8m persons → POP
63.68% of GDP → DEBT_GOV
119,385
516,387
39,882 persons
migrated from China to UK&Spain
5.5 %
7.9 %
UK&Spain
GDP ↗ $ 3,834bn
POP → 184.7m persons
DEBT_GOV → 45.29% of GDP
China
$ 3,940bn ↑ GDP
1,326m persons → POP
31.49% of GDP → DEBT_GOV

THANK YOU FOR WATCHING

Vis #56

https://youtu.be/rQ45QWieVvg

Wind & Words

An Interactive Game of Thrones Data visualization

Using data from script dialogue

Analyze and visualize characters’ words from the first six seasons of HBO’s Game of Throne

Contents

1 Dialogue
2 Vocabulary
3 Sentiment

DIALOGUE

Character Name
Character Figure
Dialogue Count
Dialogue
13

VOCABUNARY

SENTIMENT

character

Buble size: count of dialogues

Positive
Negative

+1.301

Dialogue of this character

Thank You

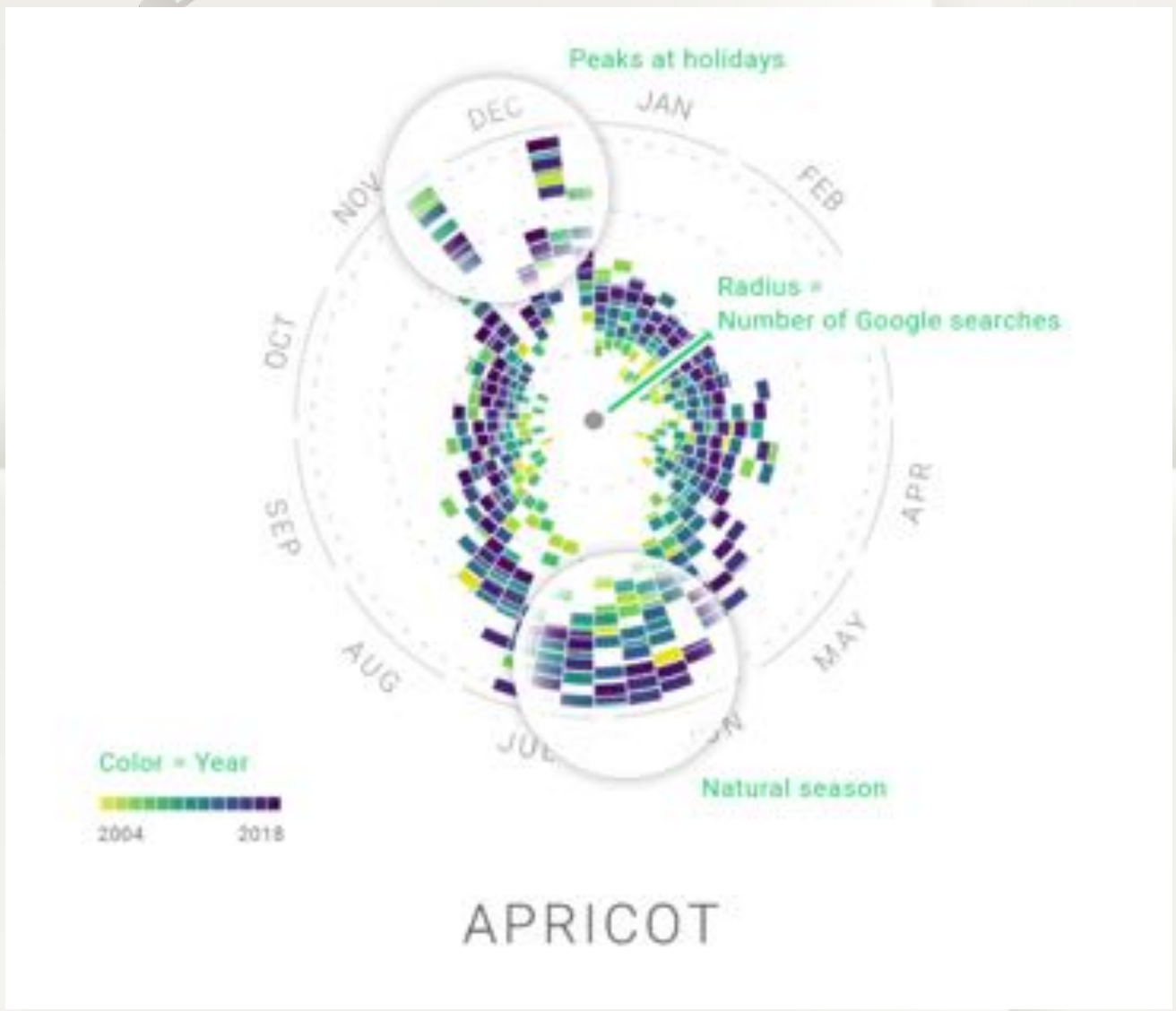
Vis #57

https://youtu.be/BYEa_iLHKeo

TOP VISUALIZATION

The Rhythm of Food

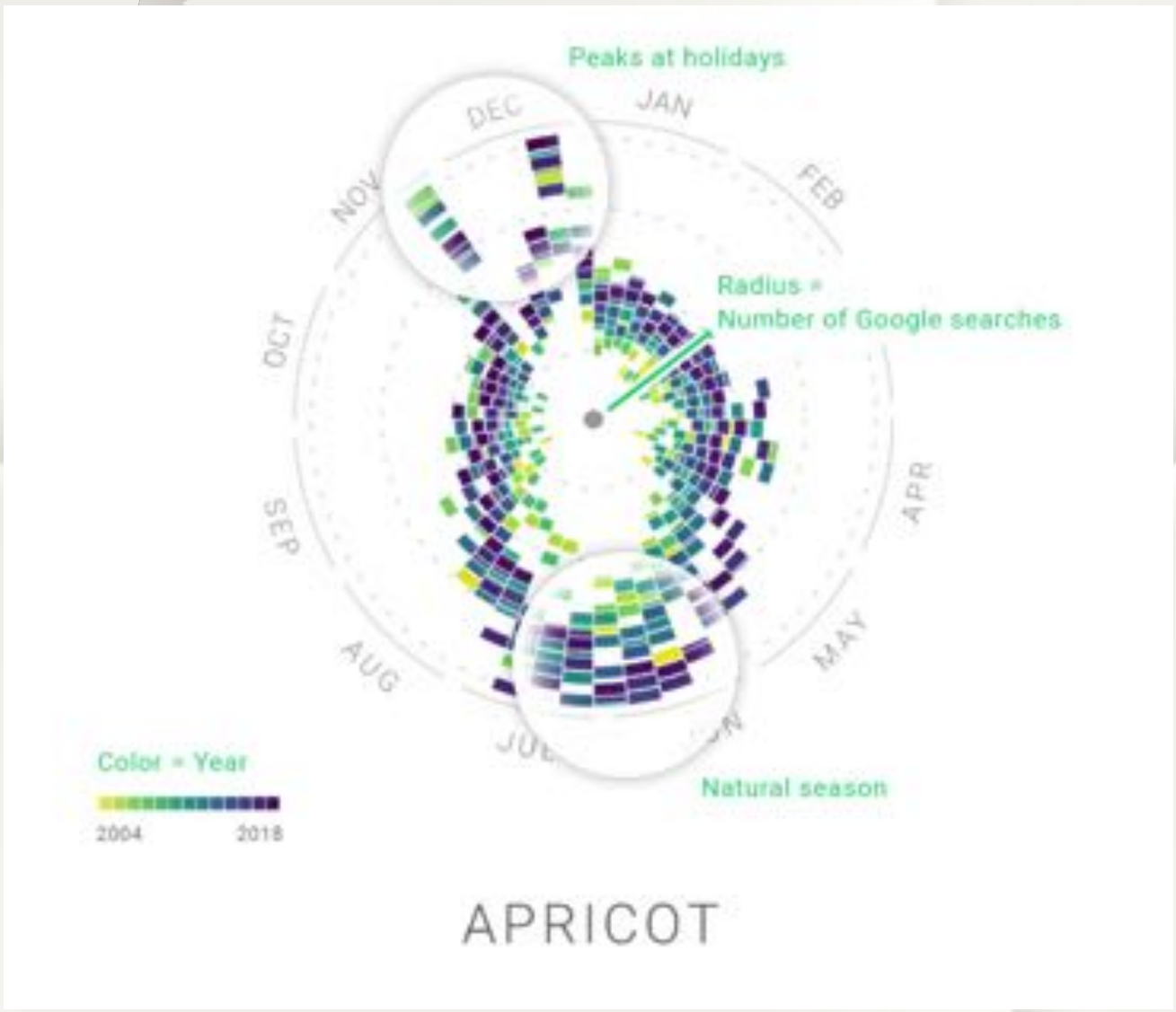
WANG, Xueying



The Rhythm of Food

-- Google News Lab

to investigate the seasons and rhythm of food around the world.



The Encoding Scheme

Marks: Areas

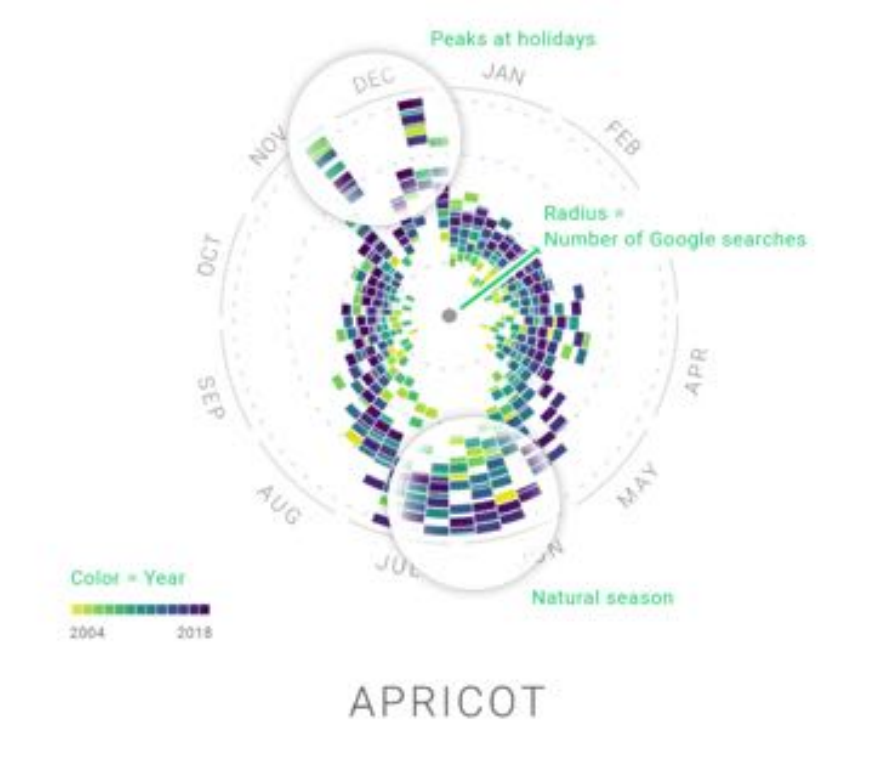
Channels:

-- Angles

-- Length (Radius)

-- Hue (Color)

Why it's Impressive?



- Conveyed Messages
- Effectiveness
- Aesthetics

Thanks for
Watching

Vis #58

https://youtu.be/7kdlKSAlKOc

Top Vis Competition

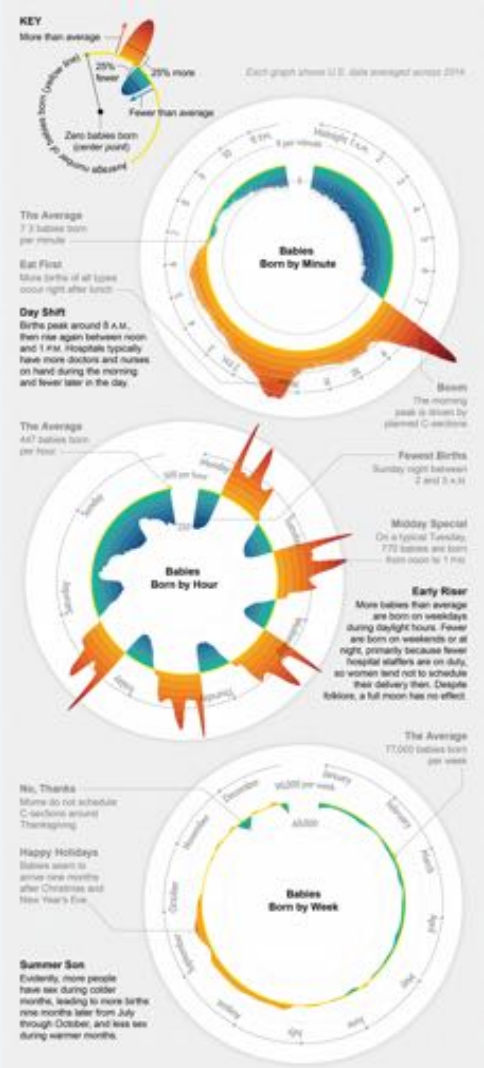
WANG YUXIANG

2019-11-09

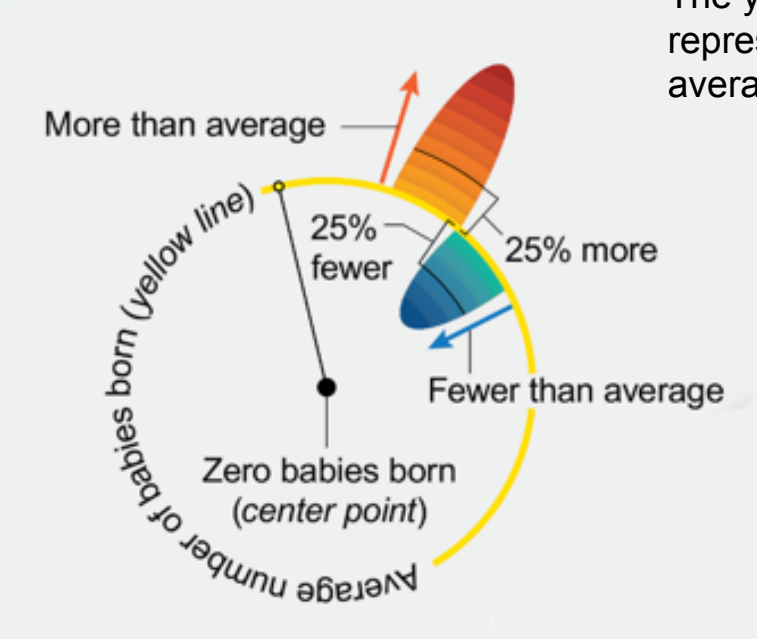
5005

Exploring Babies' Born Time

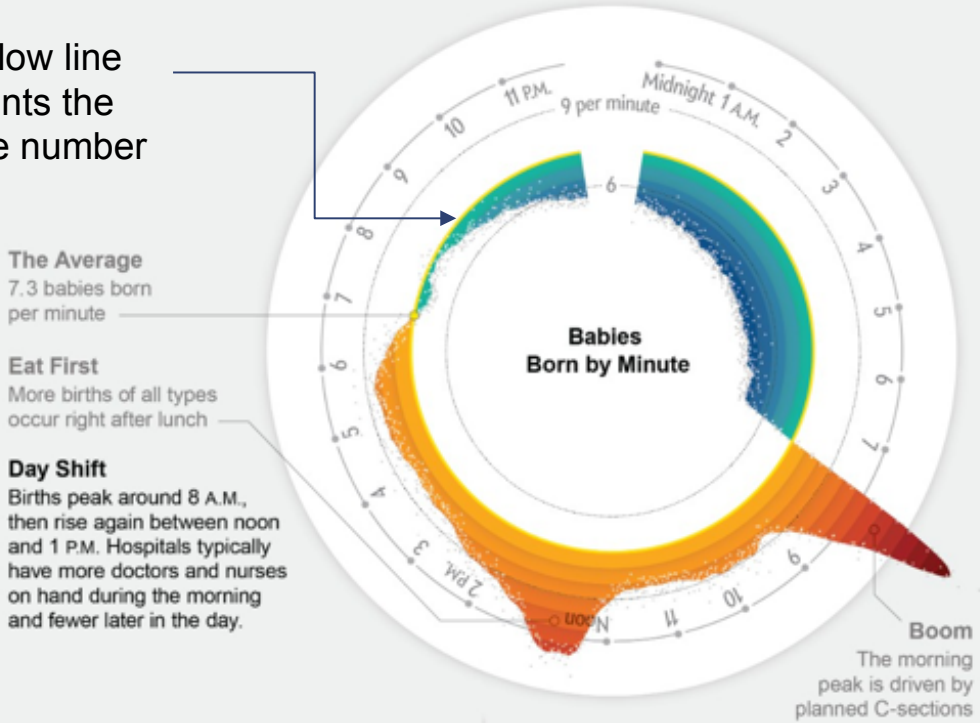
https://www.informationisbeautifulawards.com/showcase/2100-why-are-so-many-babies-born-around-8-00-a-m



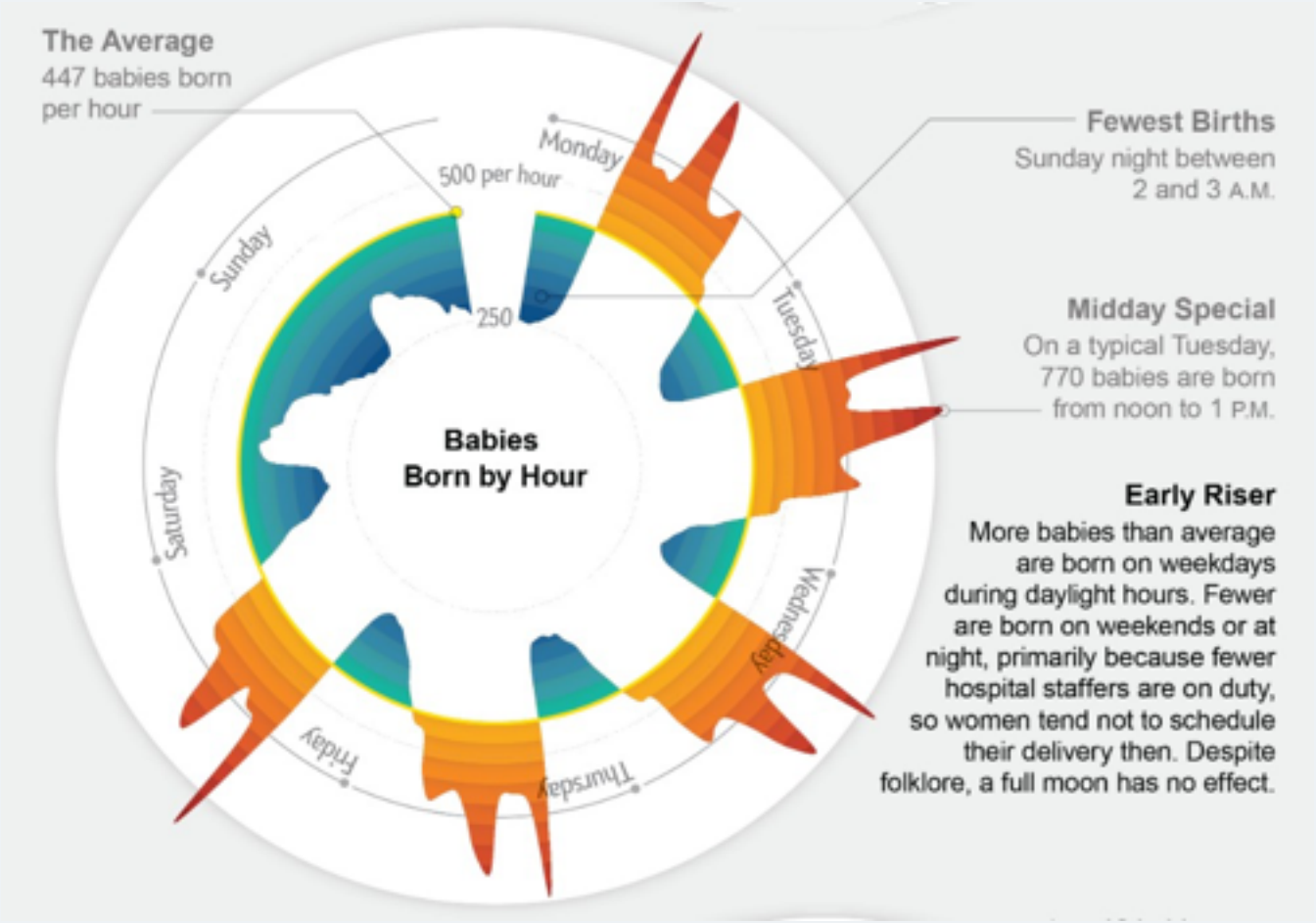
Details



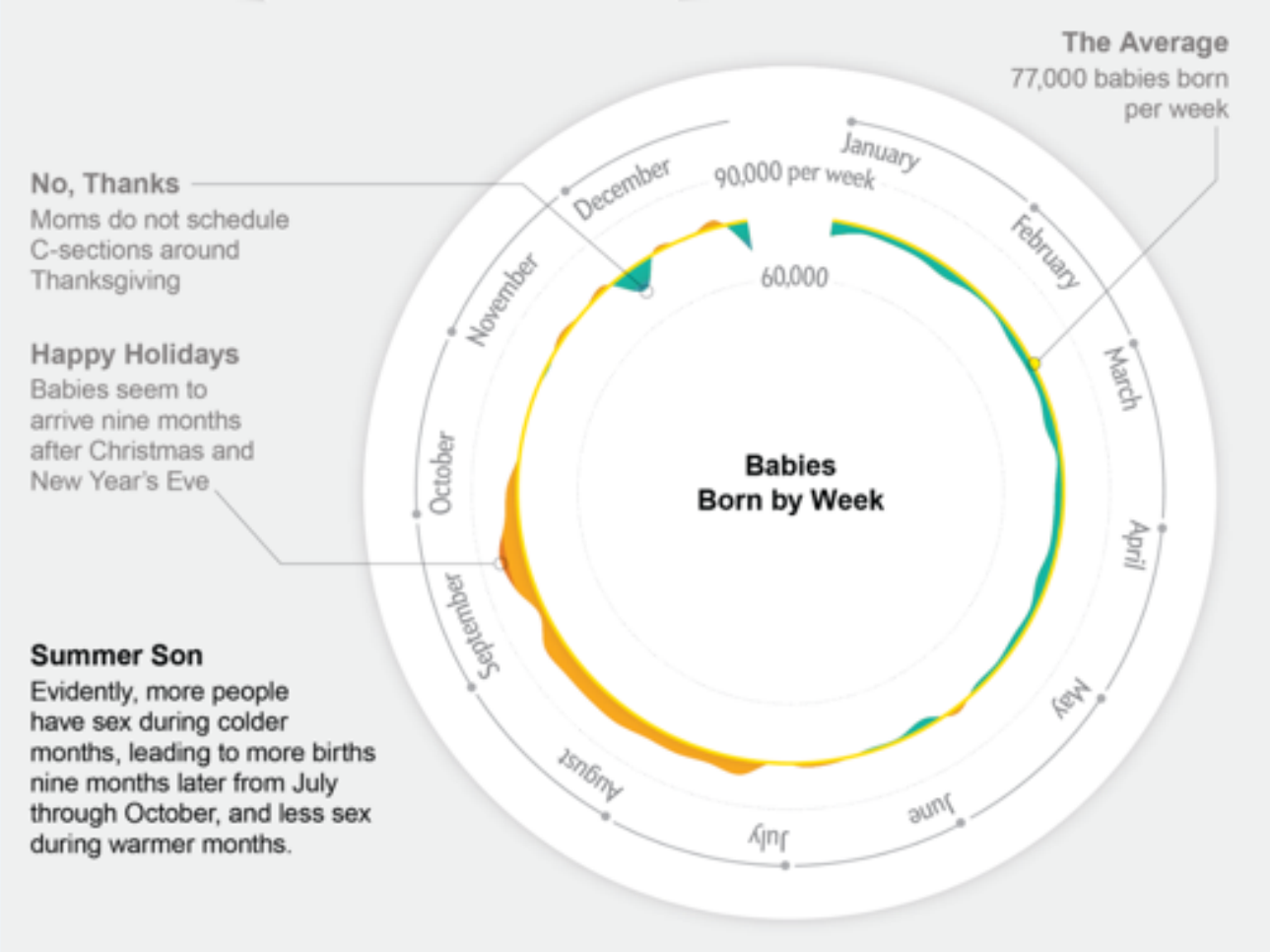
The yellow line represents the average number



Babies born by minute in one day



Babies born by hour in one week



Babies born by week in one year

THANK YOU FOR WATCHING!

Vis #59

https://youtu.be/feAEF-vvOOA

Top Vis Competition

The Millions Who Left

WEN HUIYANG
20643511

OUTLINE

01 Background

02 Visual Design

03 References

1 Background

Since German reunification in 1990, millions of people have left from East to West, leading to a demographic crisis.

The visualization shows exactly what happens of the move in German.

2 Visual Design

- Geometry map
- Point color
- Point quantity
- Trajectory pattern
  - Spatial
  - Temporal
- Text & Explanation

- Unappealing cities
- Attractive cities
- Balance happens
- Reasons behind

2 Visual Design

Insight of four Western Cities

Refugee origin

East/West balance

3 References

- https://www.pinterest.com/pin/361062095100124654/?lp=true
- https://www.zeit.de/politik/deutschland/2019-05/east-west-exodus-migration-east-germany-demography

Thanks For Watching

Vis #60

https://v.youku.com/v_show/id_XNDQzNTcyMjA2NA==.html?spm=a2h3j.8428770.3416059.1

The Rhythm of Food

by Google News Lab and Truth & Beauty explore

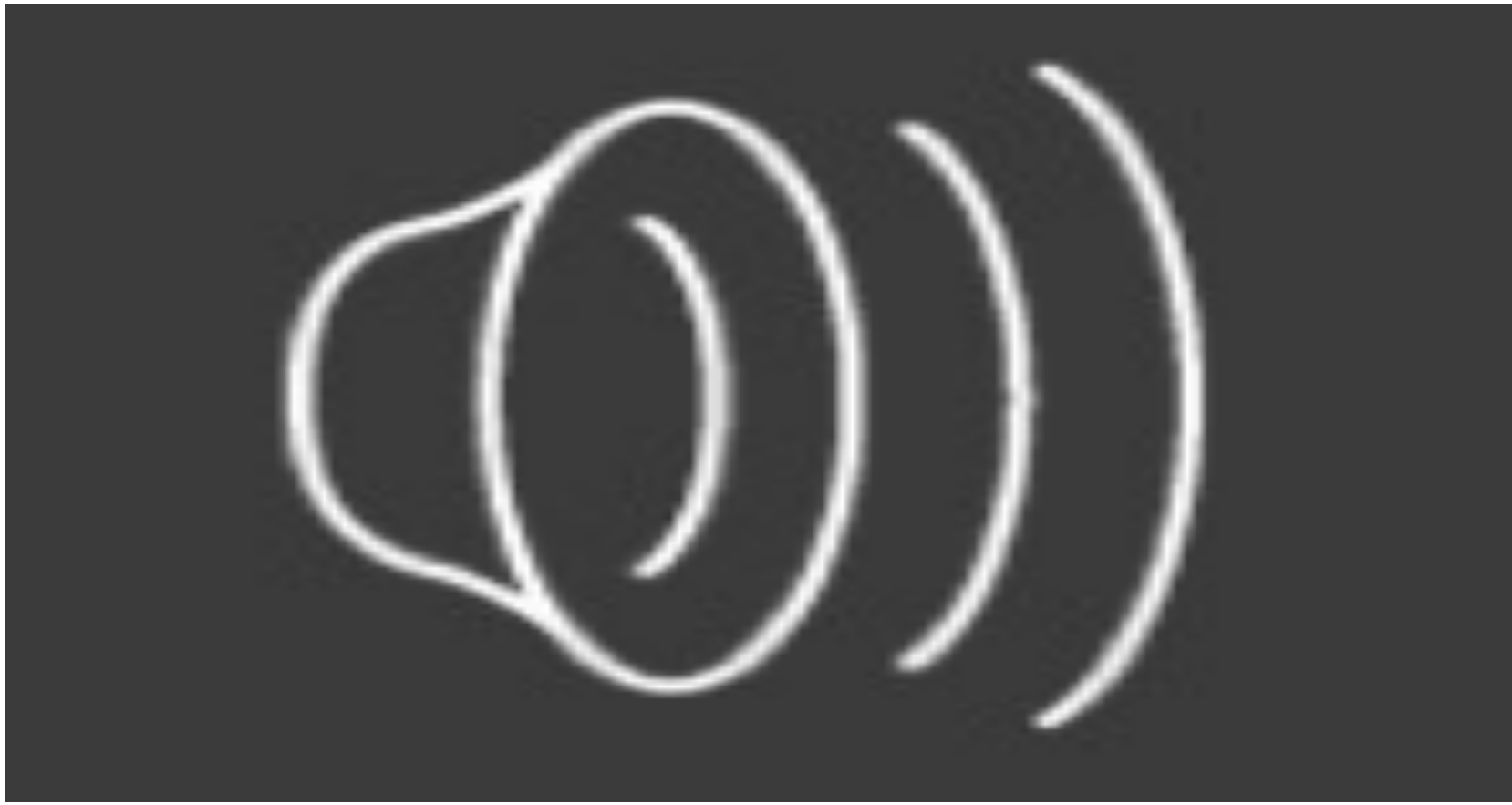
Speaker: Wu Zhiwei

2019

/01 General Introduction

01 Data

- Weekly google trends data for hundreds of fruit
- Discrete-time data



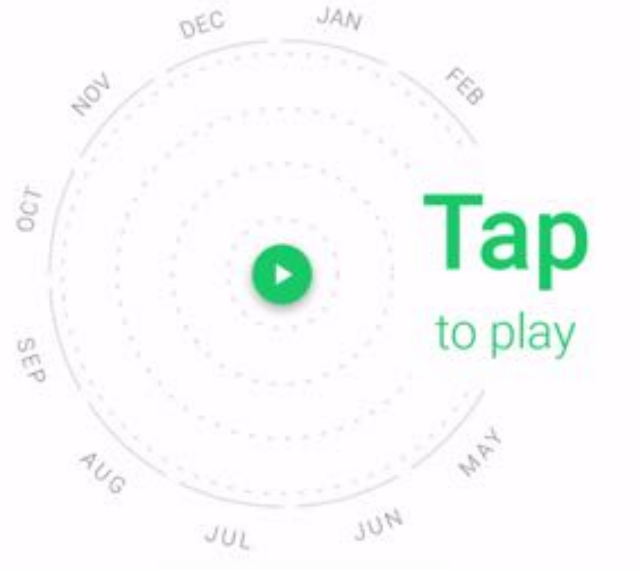
02 Task

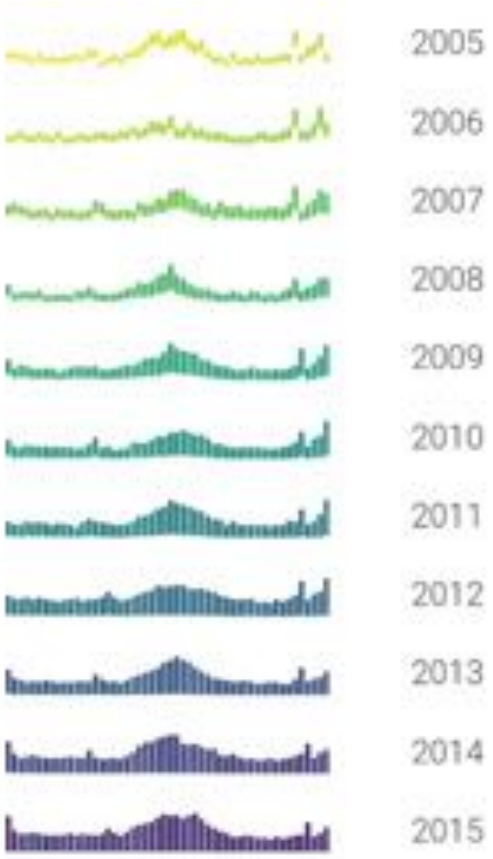
- Trying to figure out how the preferences of the food are changing.

03 Insight

- Each vegetable, fruit, dish or drink has its own signature seasonal pattern, they are associated with season, special festivals, and so on

/02 Perception and Color





Old Memory

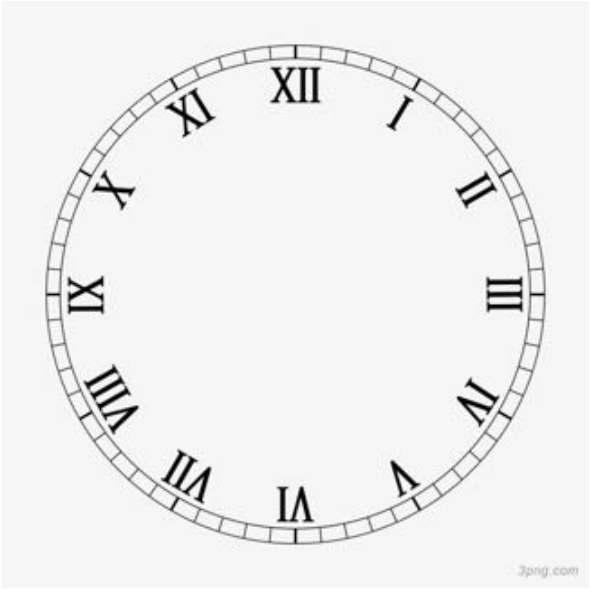
Yellow

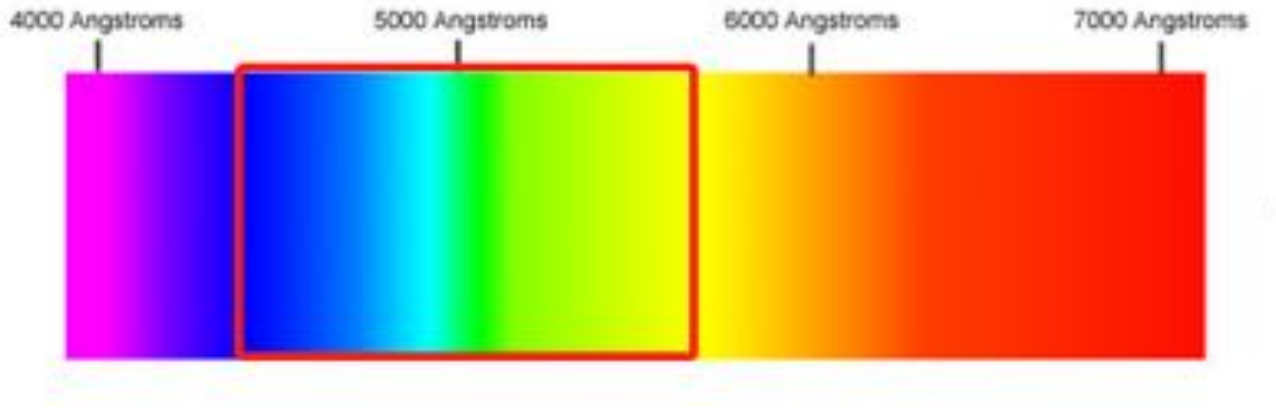
Past Time

Current Time

Sense of Tech

Blue





/03 Multivariate and Discrete-time Series Encoding

- Search volume

The search volume is encoded as the size of the arc.

- Year

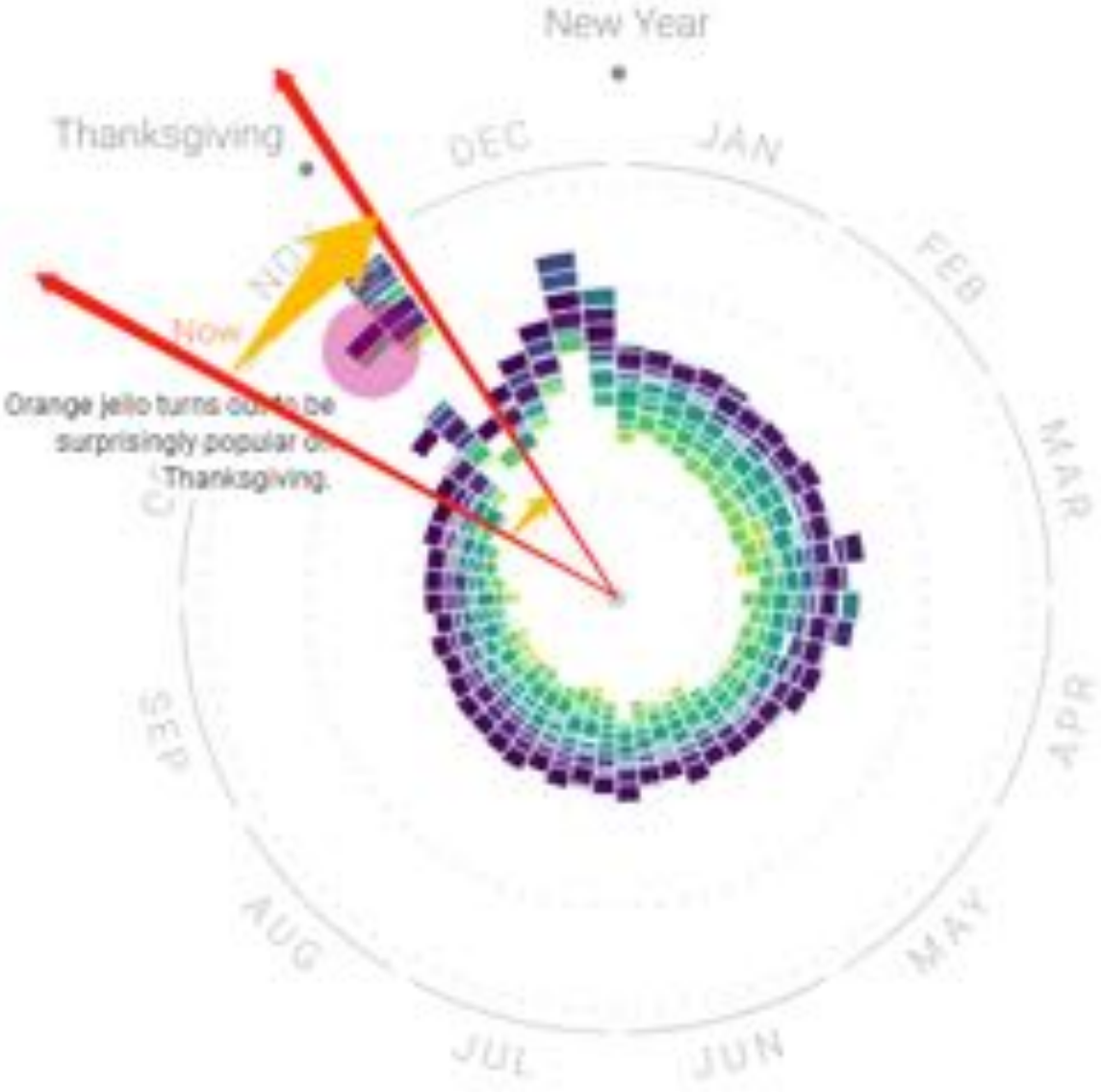
Each year is represented by a color

- Month

The month is encoded as twelve hours in the clock

- Week

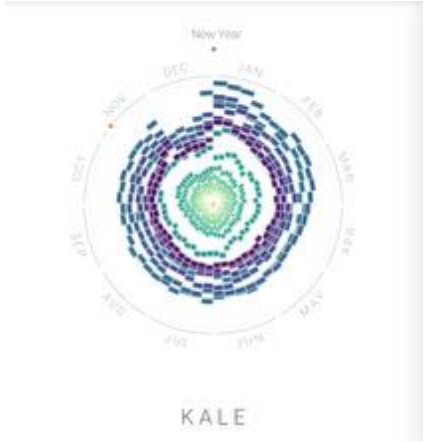
The entire ring is evenly divided into 52 small segments, representing 52 weeks of the year.



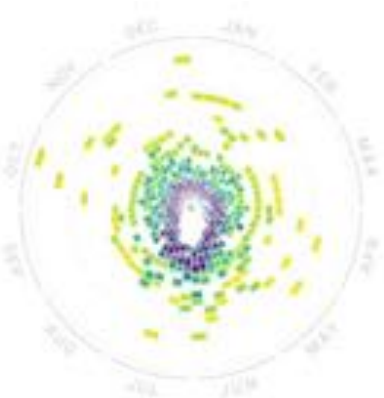
/04 Insight Provided

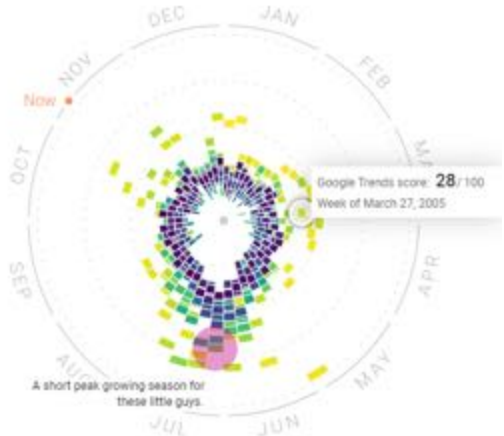
Some items fade in and out of a natural season

Somes are evenly distributed around the year



Some can clearly see that the search volume is decreasing year by year.





THANKS

Vis #61

https://www.youtube.com/watch?v=fIz7zAVnefk

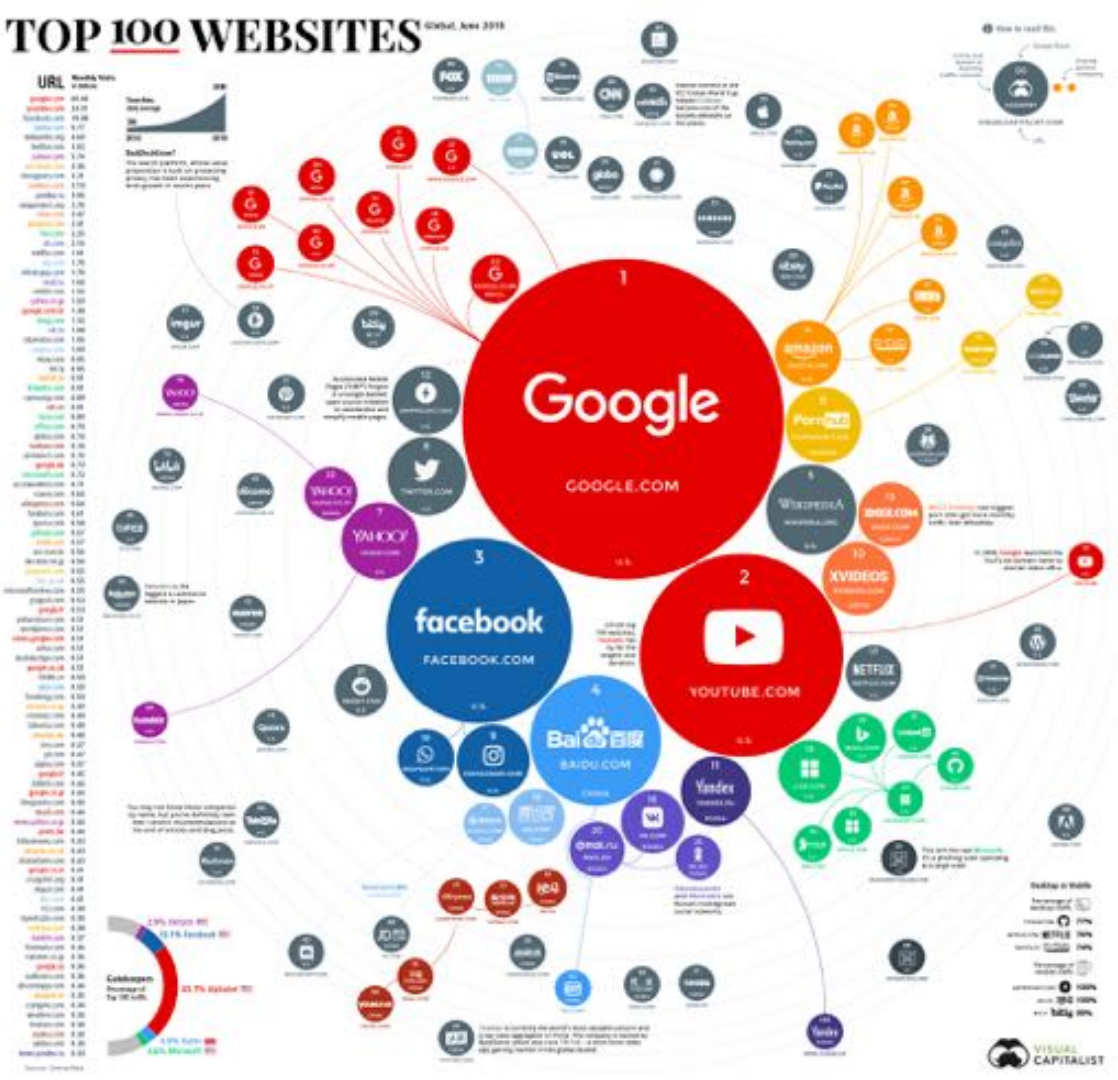
Zhiwen Wu

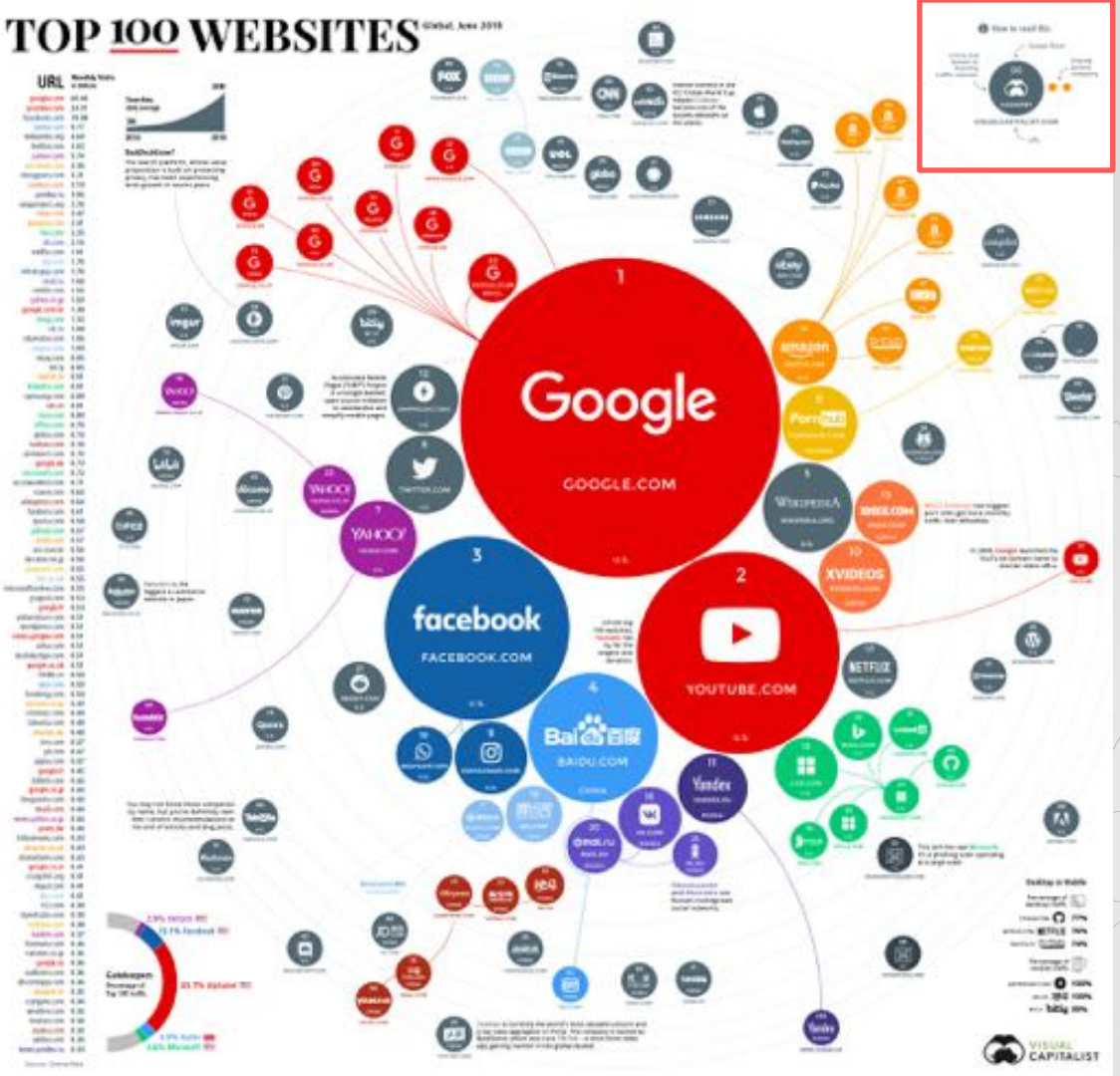
Top Vis Competition:

Top 100 Website in the World

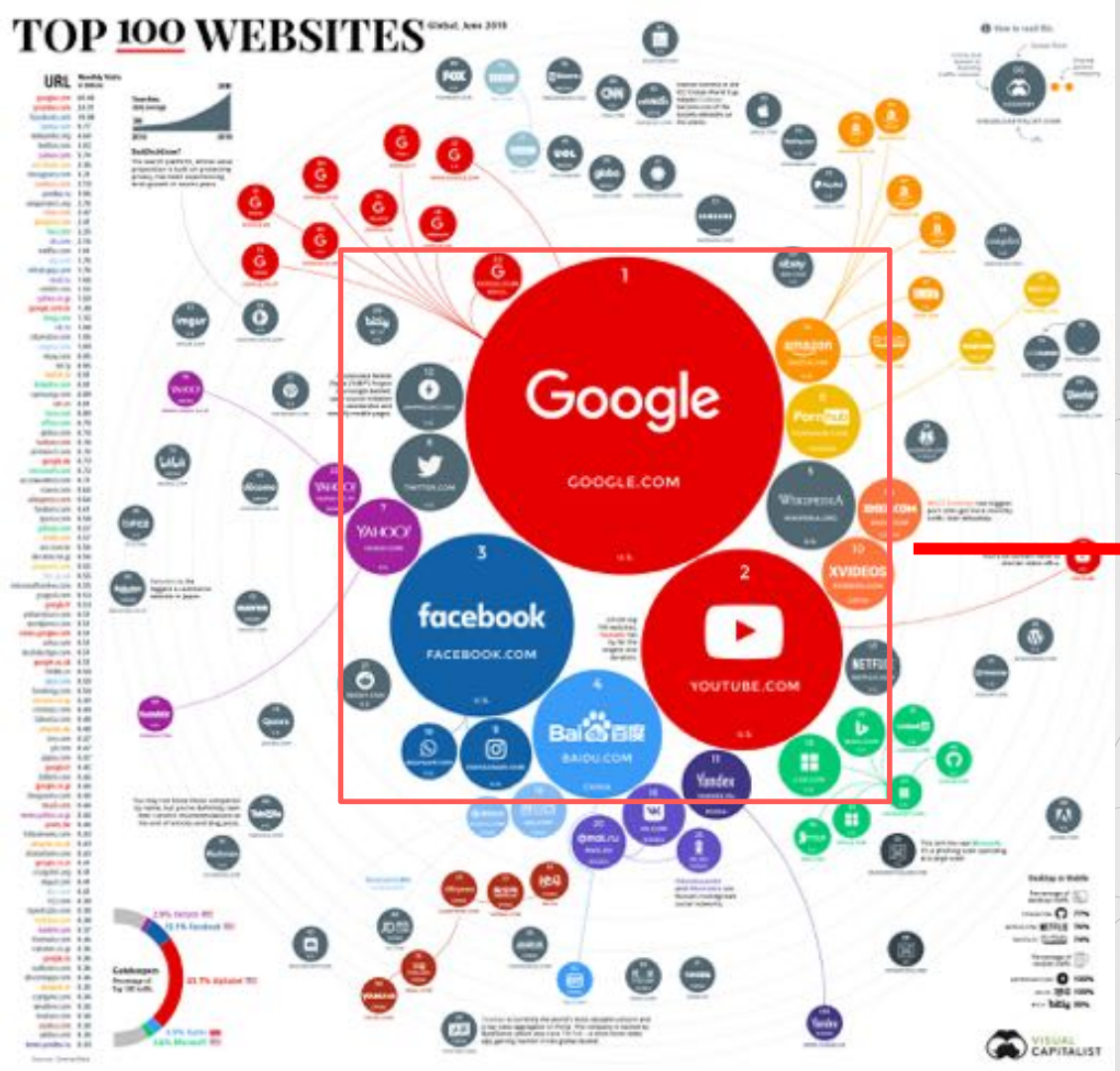
Source:
https://www.visualcapitalist.com/wp-content/uploads/2019/08/top-100-websites-ranking.htm

Zhiwen Wu

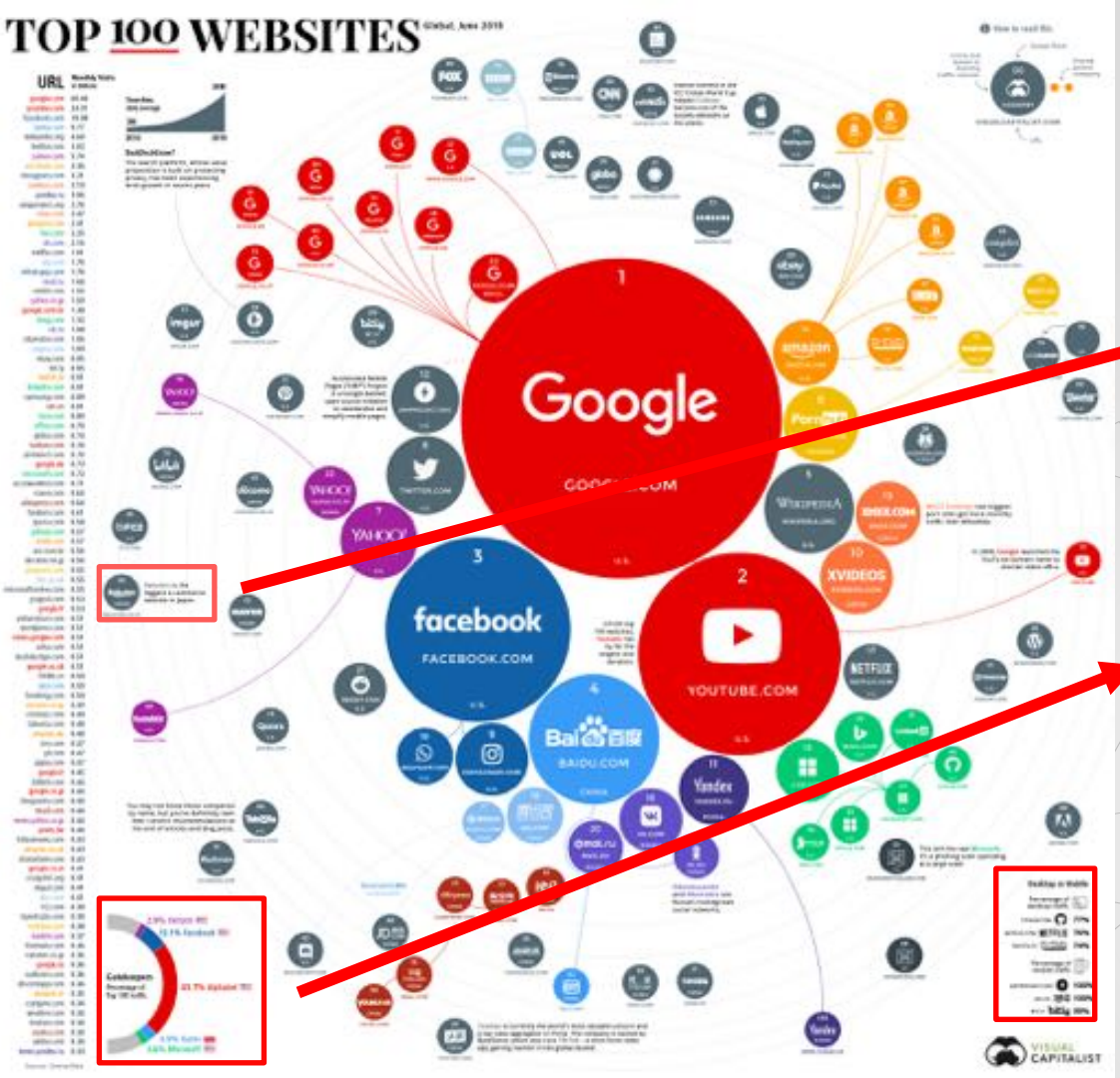

TOP 100 WEBSITES
Global, June 2018
URL
1
Google
GOOGLE.COM
2
YOUTUBE.COM
3
facebook
FACEBOOK.COM
4
Baidu 百度
BAIDU.COM
VISUAL CAPITALIST



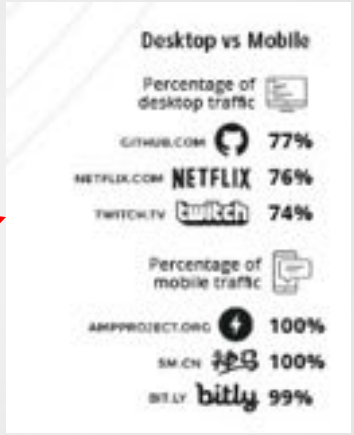
Encoding Scheme:



Intuitive Design:



Varied Messages:



Advantages:

1. Beautiful design
2. High readability(Intuitive)
3. Efficient implementation
4. High information gain

Vis #62

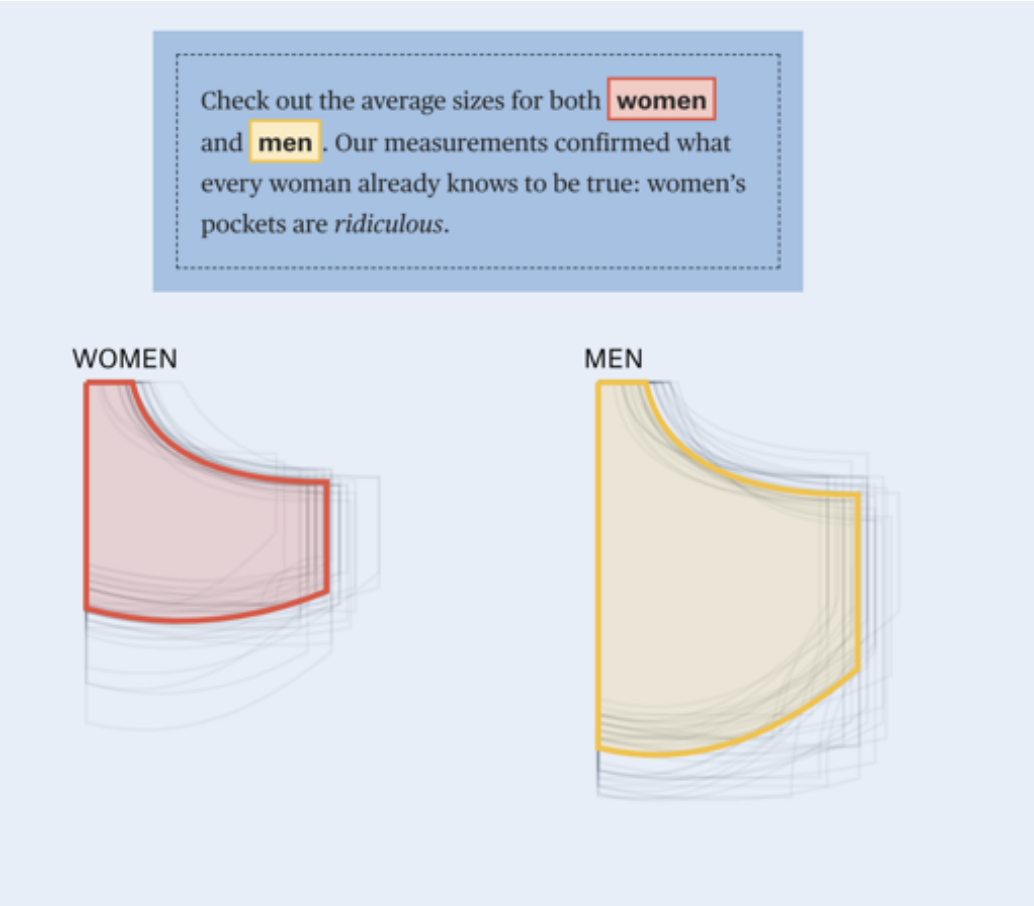
https://www.youtube.com/watch?v=hVBF-bvFRMk

Women’s Pockets are Inferior

XIE WEIYAN

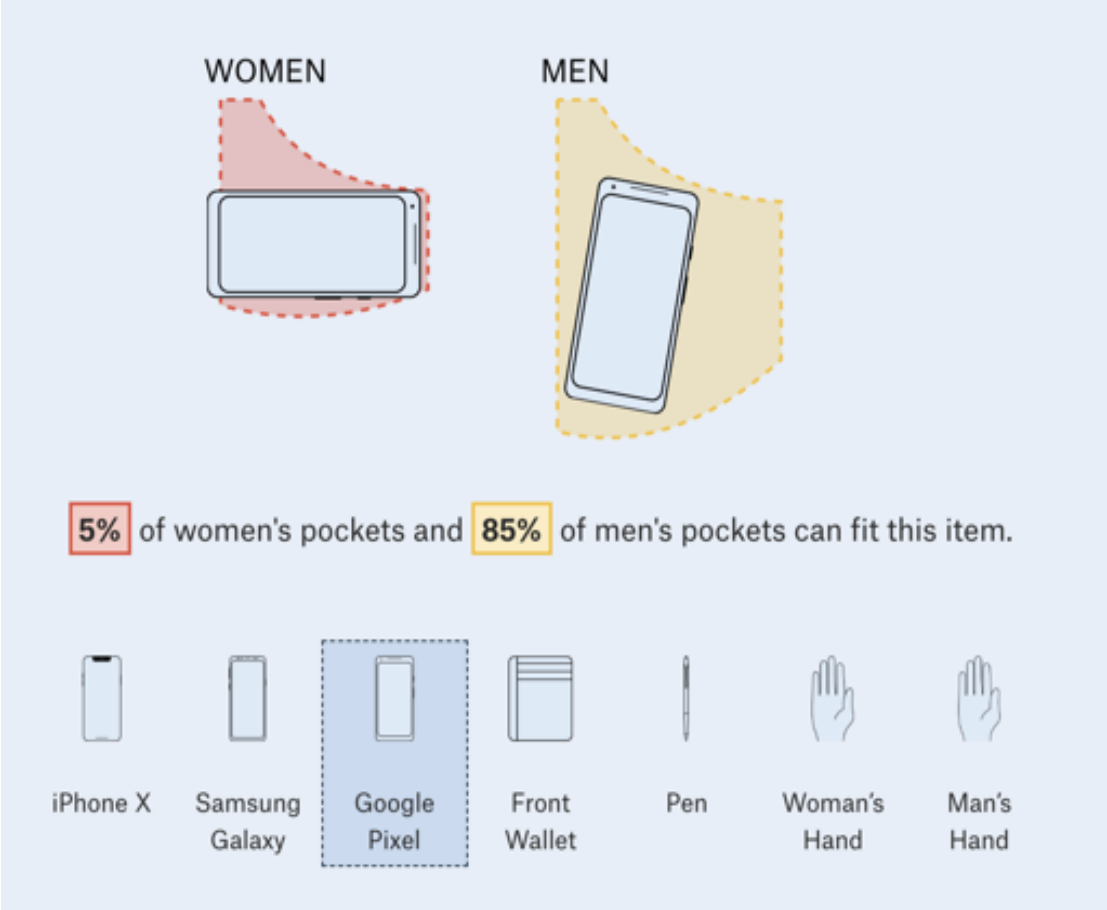
https://pudding.cool/2018/08/pockets/

Average Size



It creates an average pocket size (displayed out for readers to see) for both men's and women's jeans and compares them in-depth.

Interactive Simulator



A simulator to show how various smartphones and items fit in the two genders of pockets

Thorough List

It also has a thorough list of different jeans for both genders and allows readers to filter by price, brand, and style.

Some Interesting findings from the Visualization

- Only 40 percent of women’s front pockets can completely fit one of th e three leading smartphone brands.
- Less than half of women’s front pockets can fit a wallet specifically des igned to fit in front pockets.
- And you can’t even cram an average woman’s hand beyond the knuckl es into the majority of women’s front pockets.

Good Visualization

maxHeightFront	minHeightFront	rivetHeightFront	maxWidthFront	minWidthFront	maxHeightBack	minHeightBack	maxWidthBack	minWidthBack
14.5	15	6.5	16.5	13	15	12.2	13.7	12
14.5	14	6.5	16	12.5	15.5	12.2	13	11.2
13	13.5	6.5	14.5	12	15.5	13	13.5	12.5
13	13.5	6.5	14.5	12	14.5	13	13	12.2
13	13	5.5	14	11.5	14	12	14.2	11.7
15.5	12	6.5	16.5	12.5	14.5	12.5	12.5	11.5
12	12	6.5	14.5	12	16.5	13.7	13	12
14	11.2	6.5	15.5	12	15	12	14	12.5
13	14.5	6	13.5	12.7	16	12.7	14.5	12.5
15	16.5	5.5	15.5	12.2	14.5	12.7	13	11
12.5	14	6.5	15	12	14.5	11.5	12	10.5

Abstract Data

Public‘s Familiar Scenes

I admire the creativity of this webpage because it perfectly presents an **INVISIBLE** topic- the difference between men's and women's pocket. T he way they support their arguments with so many interesting, reader-f riendly solid **VISUALIZATION** evidence really helps deliver an unbiased n ews resource.

THANKS FOR WATCHING

Vis #63

https://youtu.be/XuvtIpK0VK0

XU Wenjie

VIS

The daily routines of famous creative people

Xu Wenjie

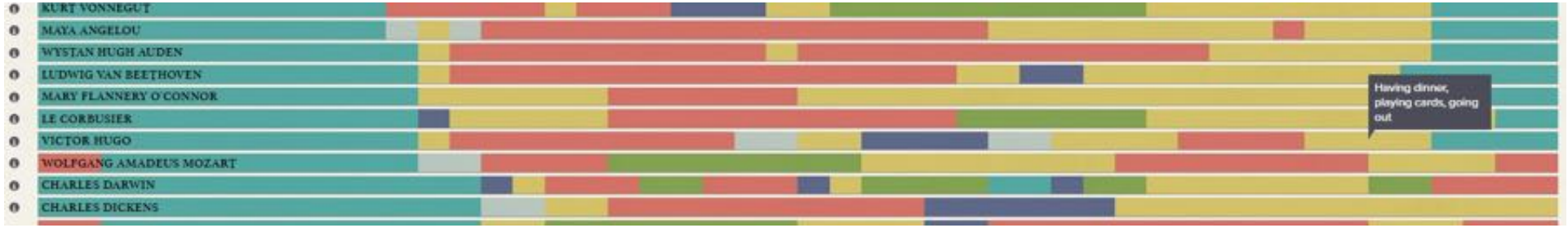
https://podio.com/site/creative-routines

Data source: insights from the book “Daily Rituals” by Mason Currey

color-coded bar chart format

A detailed reflection of the daily habits, rituals, pursuits, and priorities

It is interactive



Summary

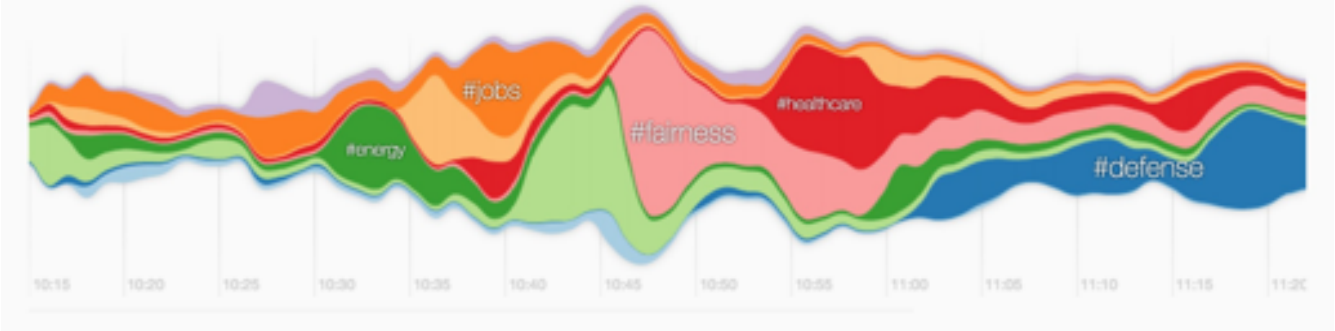
- combine reams of data into a single page
- uses color to easily distinguish trends
- allow the viewer to get a global sense of the data
- engage users by allowing them to interact with the piece
- simple to understand in a single glance

Vis #64

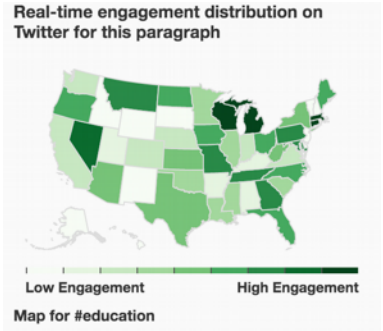
https://v.youku.com/v_show/id_XNDQzNTczNDIzMg==.html?spm=a2h3j.8428770.3416059.1

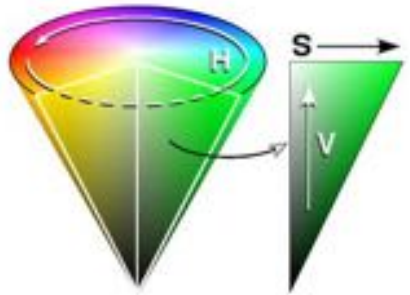
XU Xiaohan

what people follow on twitter over time.



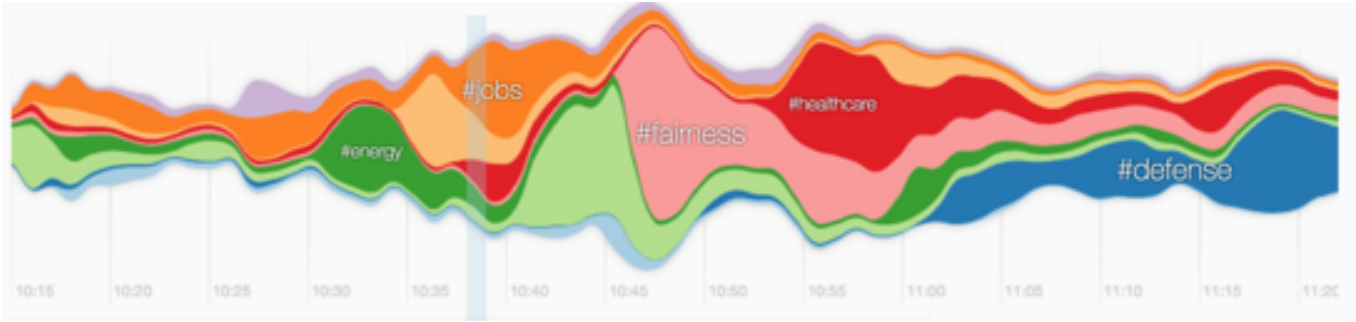
Encoding scheme
Height:
number of clicks on the topic
Width:
duration of the topic
Hue:
Saturation:
Level of engagement



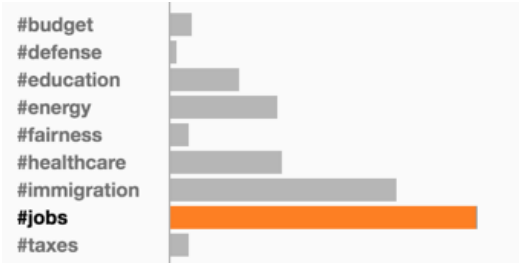


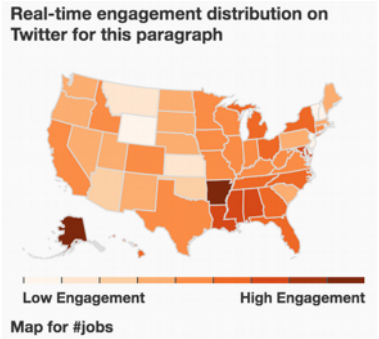
Source :http://twitter.github.io/interactive/sotu2014/#p5

what people follow on twitter over time.

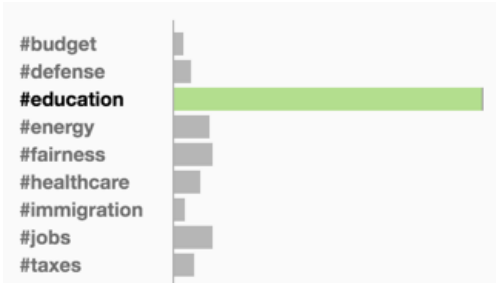


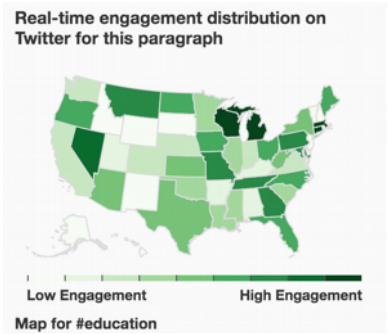
10:40



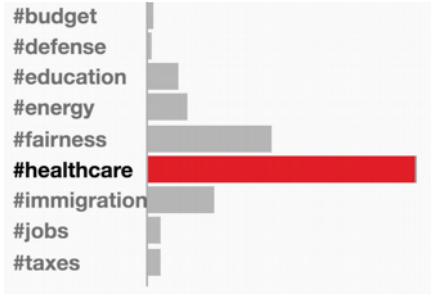


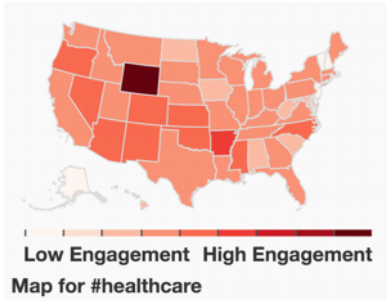
10:45





11:00





what people follow on twitter over time.

Interactive

Map geographic information

Intuitive

StreamGraph

Time series data

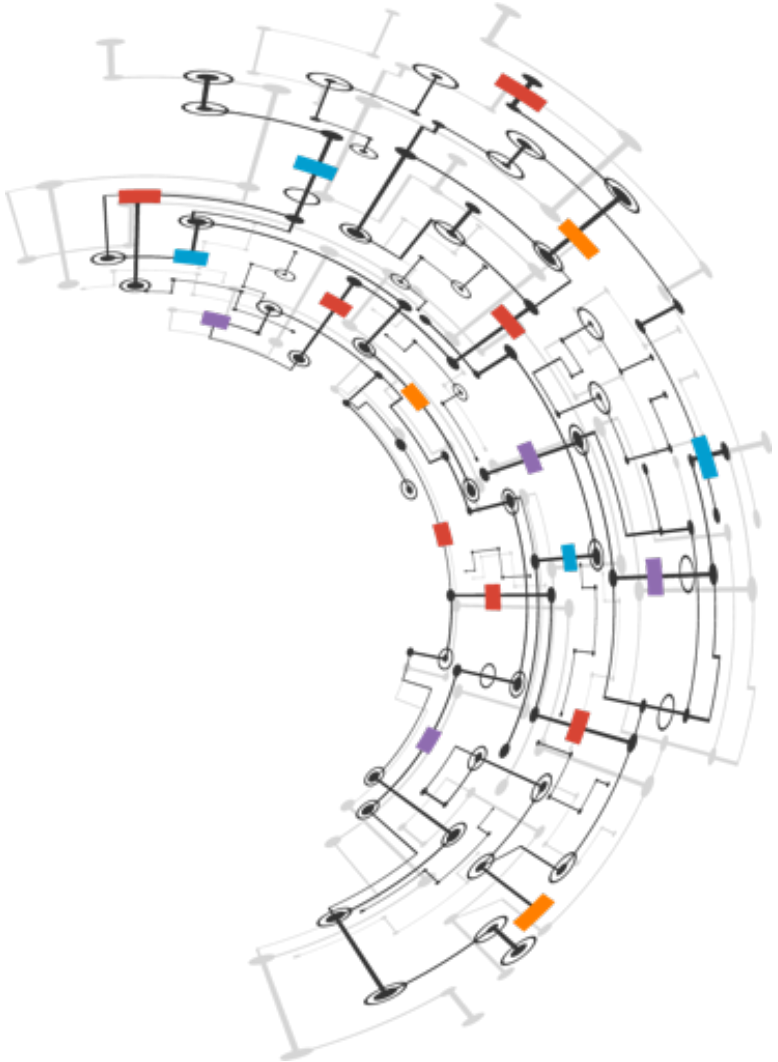
Trend

Overall aggregation

Source :http://twitter.github.io/interactive/sotu2014/#p5

THANKS

XU Xiaohan



Vis #65

https://www.youtube.com/watch?v=kyMia4sRL9A

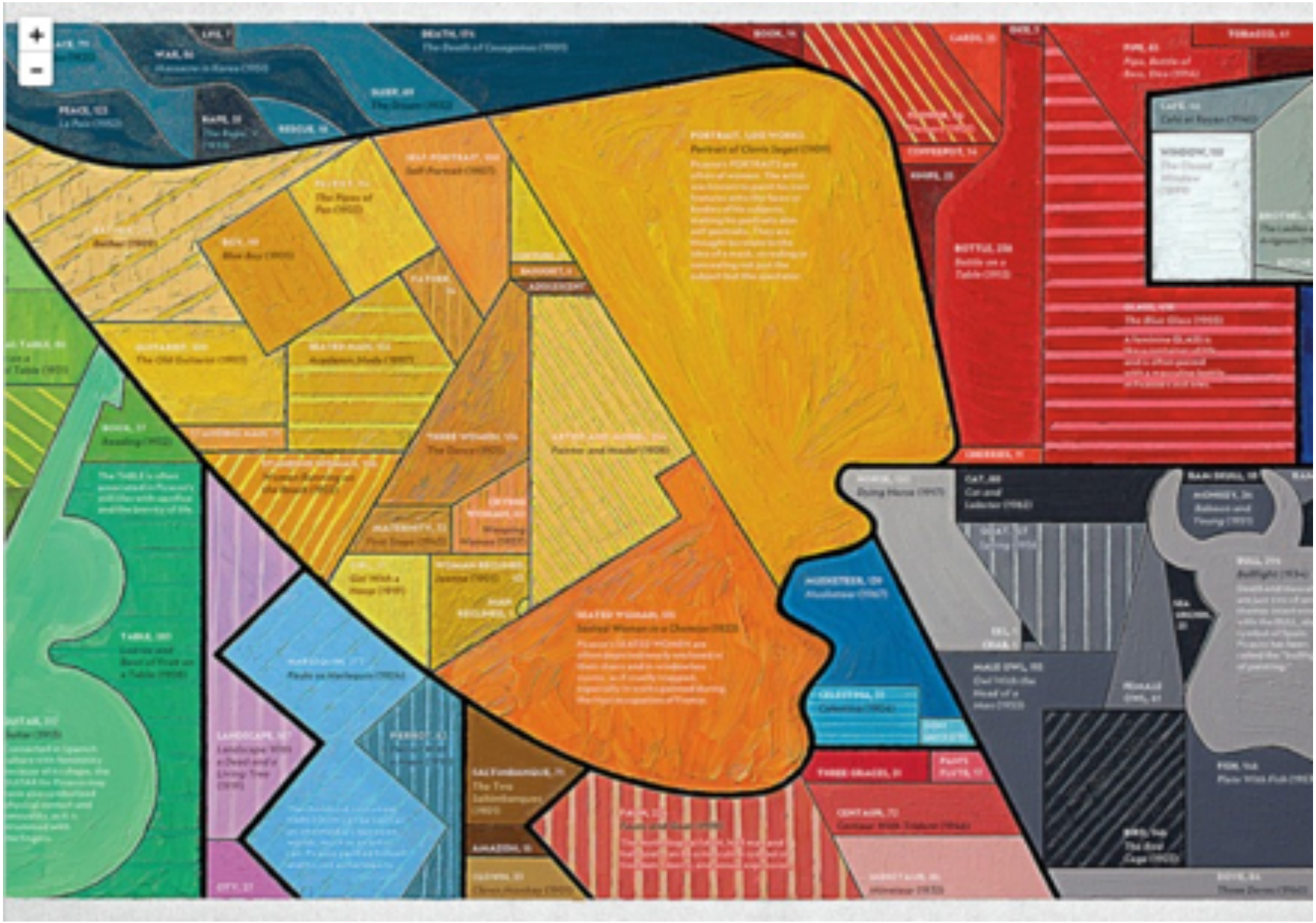
Picasso's Works

YANG Rongfeng – ryangag@connect.ust.hk

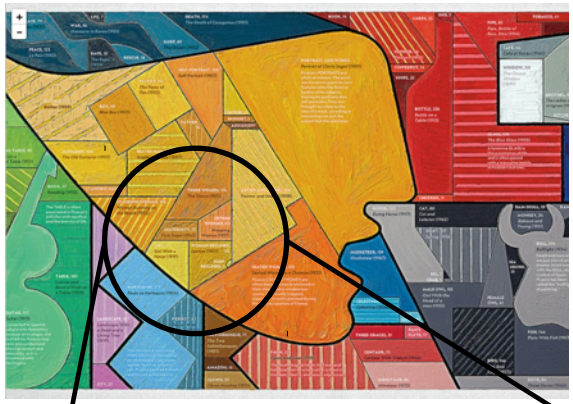
Top Vis Competition

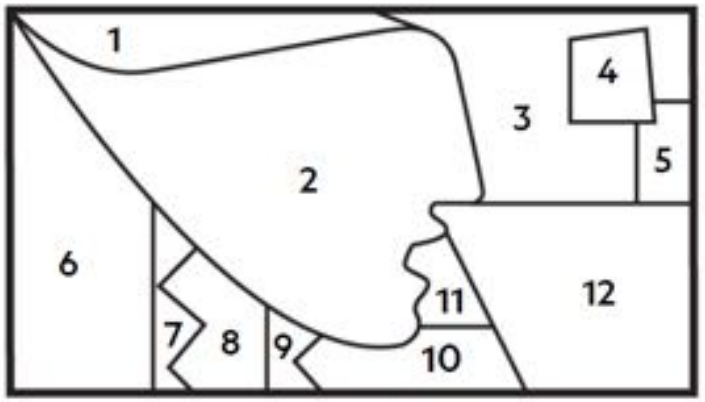
November 9, 2019

https://www.nationalgeographic.com/magazine/2018/05/genius-picasso-art-categories-infographic/

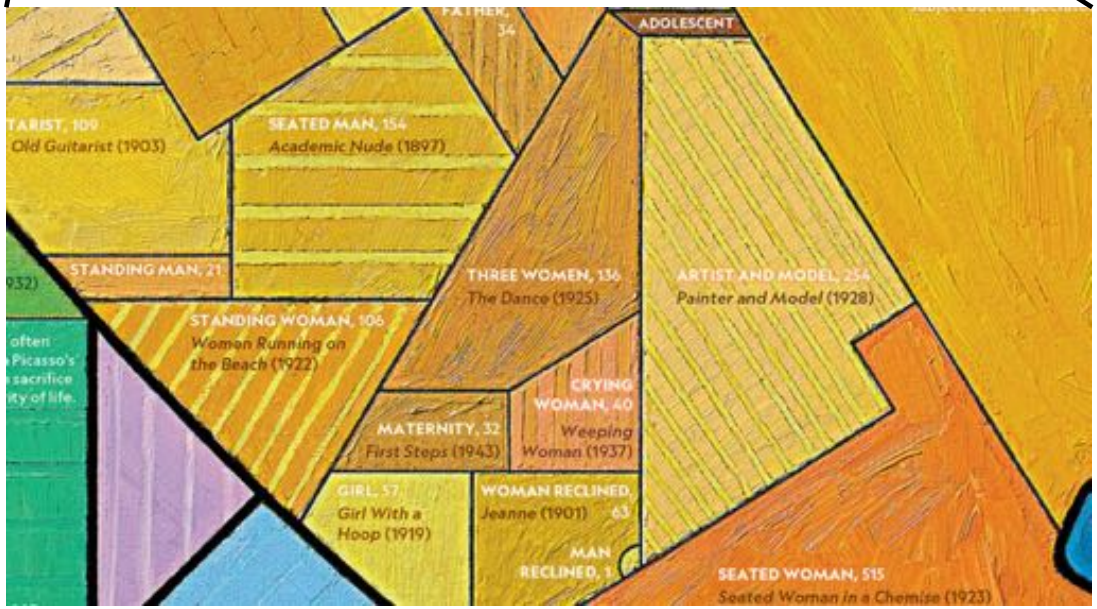


National Geographic - WE ANALYZED 8,000 OF PICASSO'S WORKS



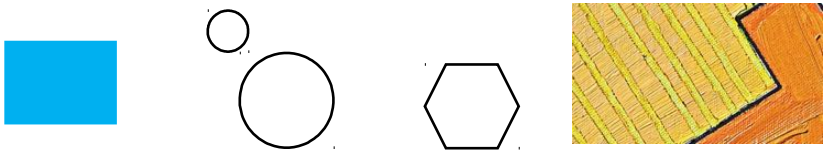


1. ABSTRACT
2. FIGURE
3. STILL LIFE
4. ROOM
5. BODY
6. OBJECT
7. LOCATION
8. THEATER
9. CIRCUS
10. MYTHOLOGY
11. LITERATURE
12. ANIMAL



The Significant Features

Why Impress?



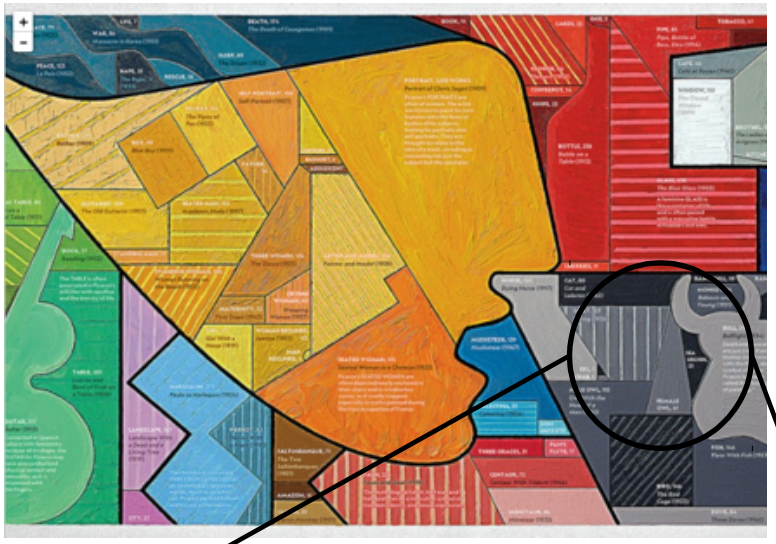
Color Size Shape
Grain

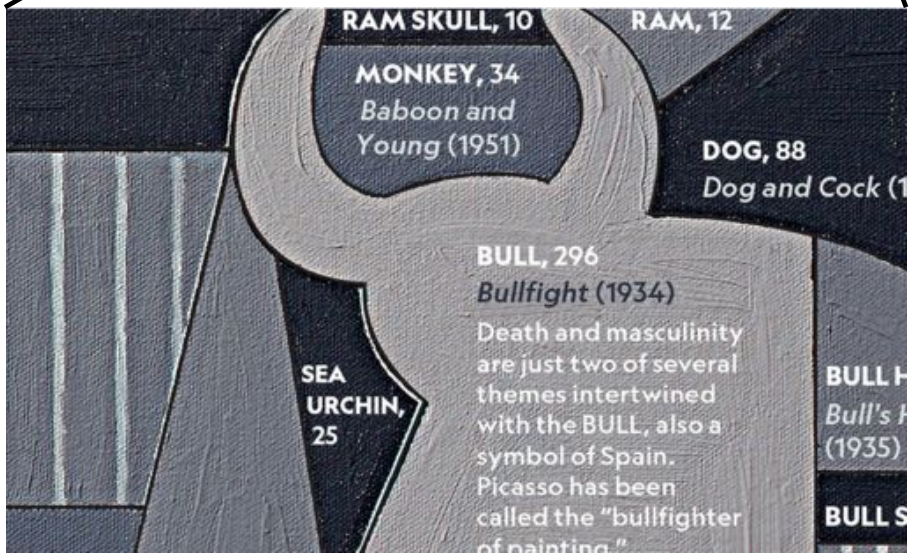
What it Conveys

More that just data....

Picasso arts themes

Individual spirit on arts





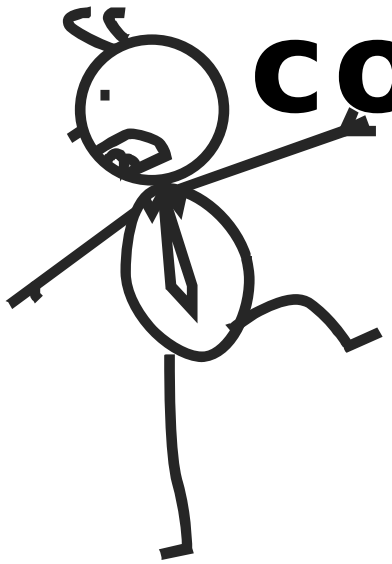
Vis #66

https://youtu.be/-vjIREY3JXQ

Universcale

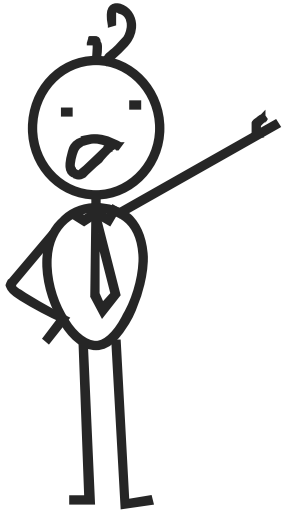
Top Vis presentation

Yang YuXia

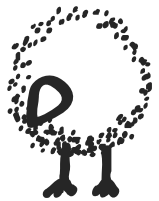


content

- Introduction and Analysis
- Summary



01 Introduction and Analysis



Introduction

Universcale lets people see and understand the relative size of the full range of known objects in our universe.

You can see the relative sizes of objects arranged on a single scale, and grasp the sizes of things that you cannot compare side by side in the real world.

Brief Analysis

Data

◎object :

name

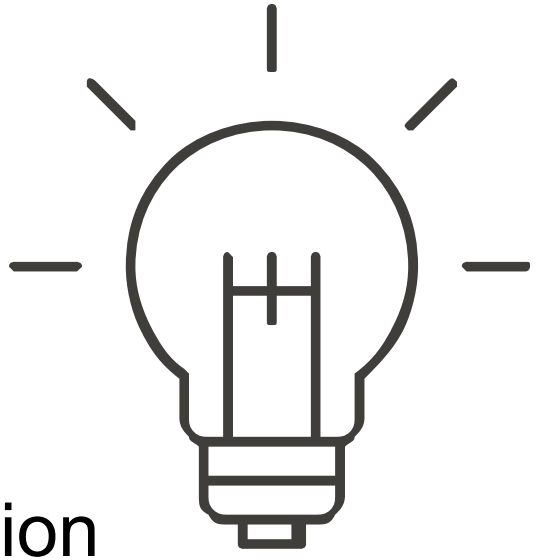
size

picture

information(explanation

)

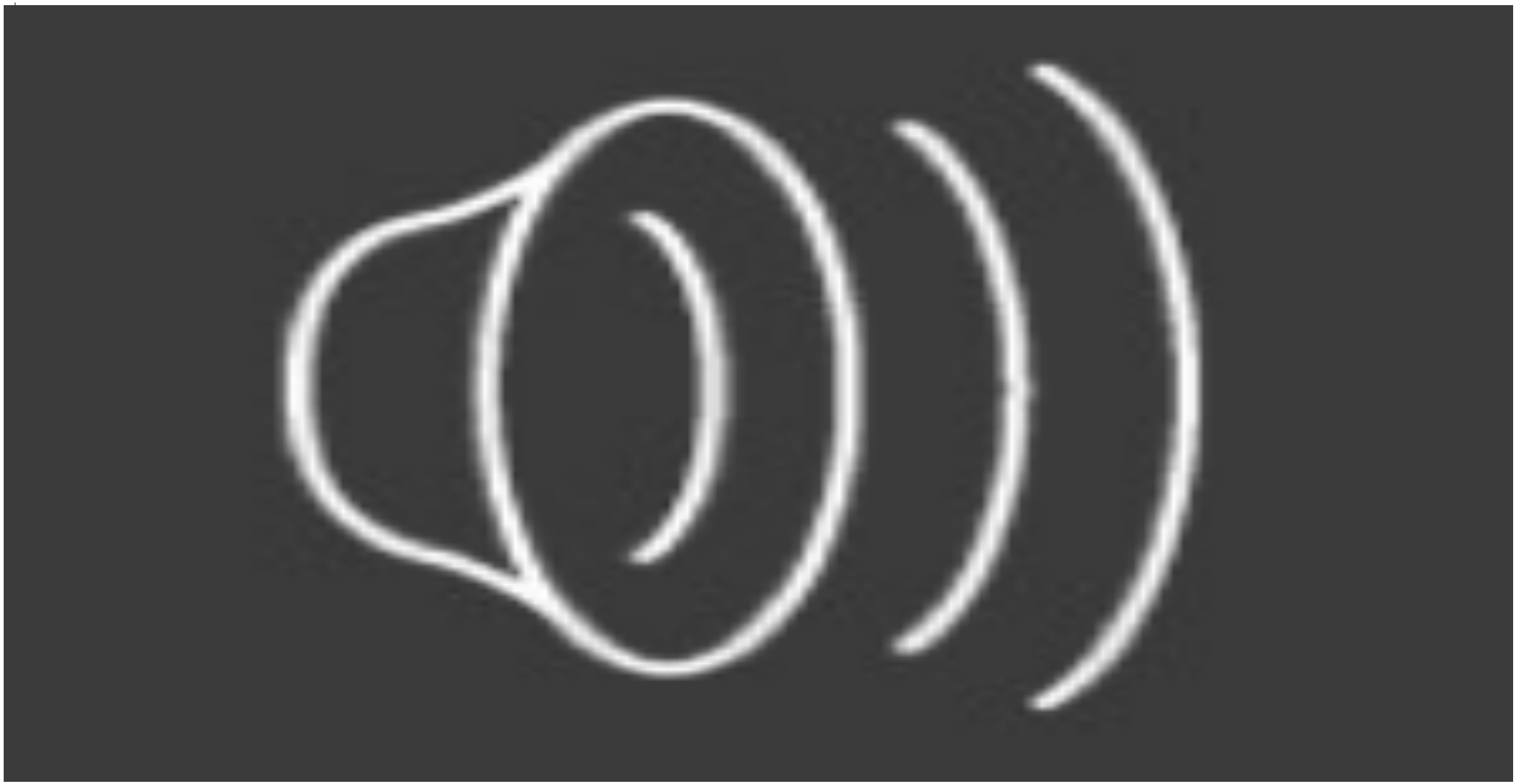
relative size



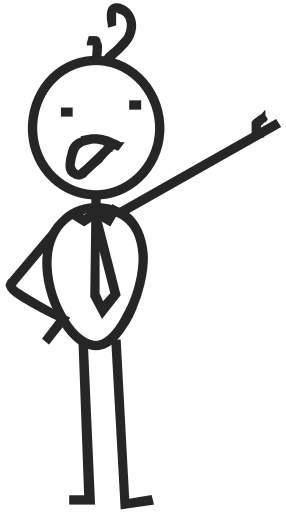
Purpose

□ relative size

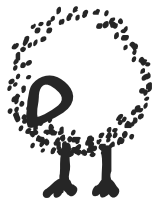
how did it work



https://www.nikon.com/about/sp/universcale/scale.htm



02 Summary



What can we learn

- **Purpose —— Relative scale**
- **Accuracy —— Different scale**
- **Intuitive —— Same scale**

Thank You!

Vis #67

2018 U.S. DEBT VISUALIZATION

Top vis competition

By Ye GuangXian(20644369)

Design:

Visualizing countries held the U.S. debt Internationally
vs U.S. held which countries' debt Internationally

GEOGRAPHIC MAP

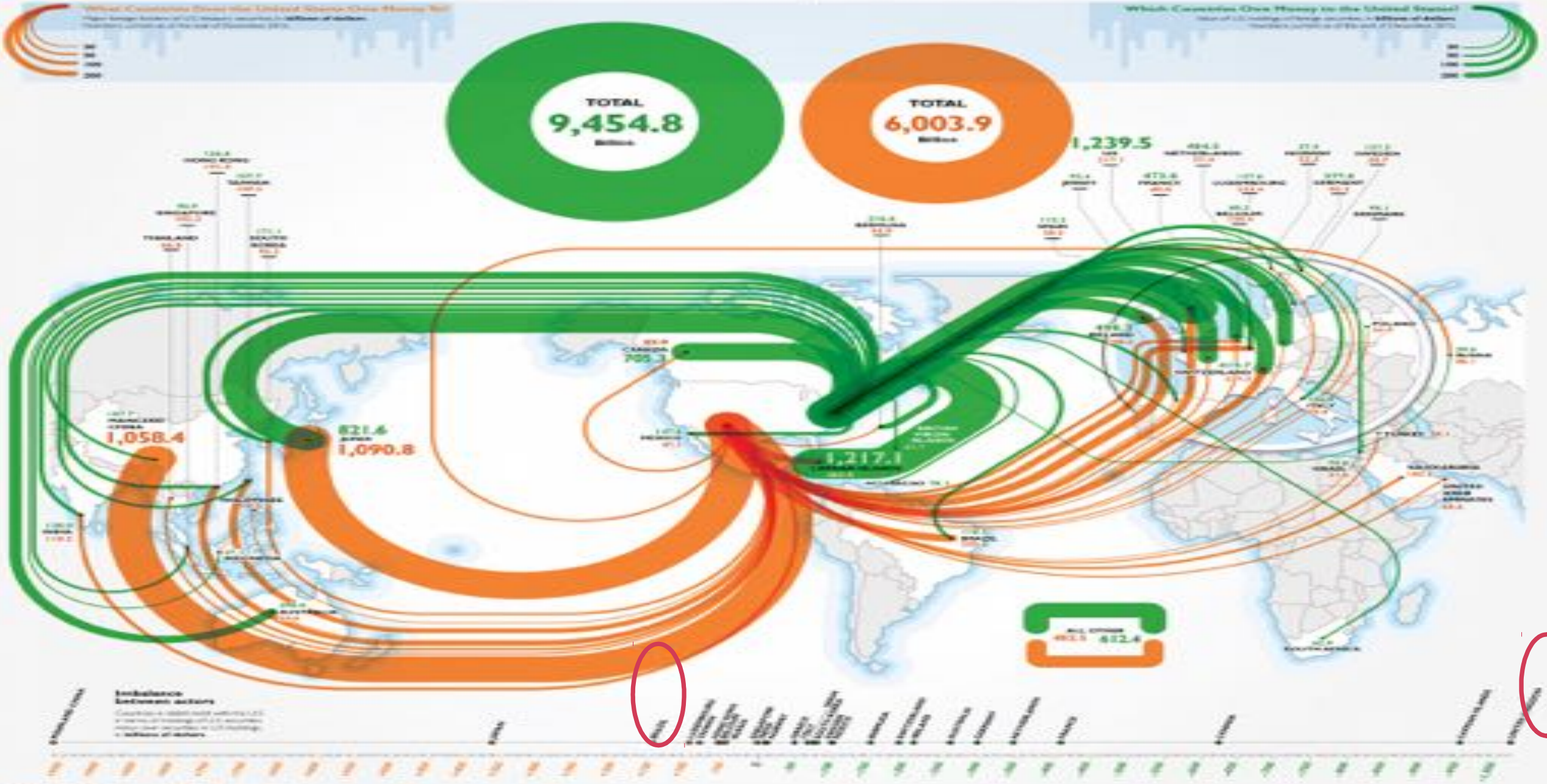
COLOR ENCODE FLOW DIRECTION

SIZE ENCODE AMOUNT OF DEBT

IMBALANCE LINE ENCODE THE RELATIONSHIP BTW COUNTRIES

DEBTS OWED TO VS DEBTS OWED BY THE U.S.

To Which Countries Does the U.S. Owe Money and Which Countries Owe the U.S.



TITLEMAX

THANK YOU
Top vis competition
By Ye GuangXian(20644369)

Vis #68

https://youtu.be/ka06qCIgq2Q

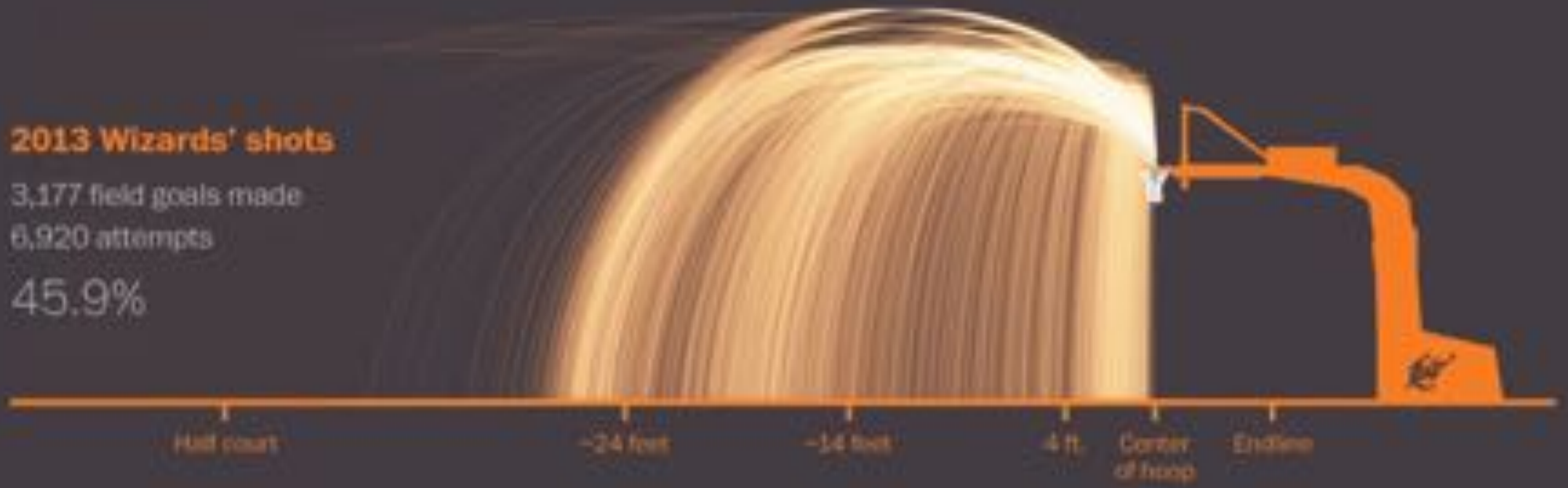
The Wizards' shooting star s

Yuan Chenge
20678255

2013 Wizards' shots

3,177 field goals made
6,920 attempts

45.9%



EXPLORE THE 2014 WASHINGTON WIZARDS

JOHN WALL

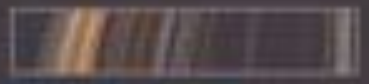
BRADLEY BEAL

PAUL PIERCE

NENE

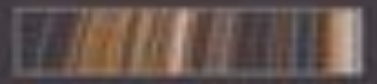
MARCIN GORTAT

DREW GOODEN

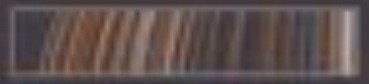

RASUAL BUTLER

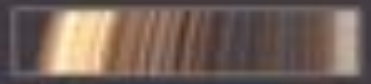
ANDRE MILLER

KRIS HUMPHRIES

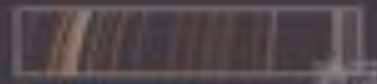

GARRETT TEMPLE

KEVIN SERAPHIN


OTTO PORTER


MARCUS WEBSTER

DEJUAN BLAIR


GLEN RICE JR.

EXPLORE THE 2014 WASHINGTON WIZARDS

JOHN WALL

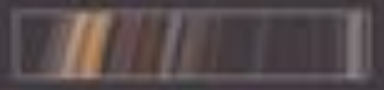
BRADLEY BEAL

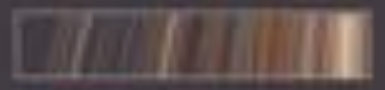
PAUL PIERCE

OTTO PORTER

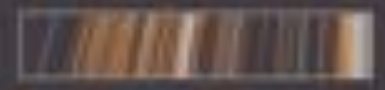
MARCIN GORTAT

DREW GOODEN

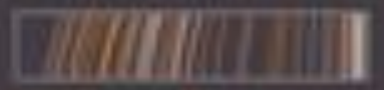

RASUAL BUTLER

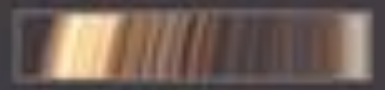

ANDRE MILLER

KRIS HUMPHRIES


GARRETT TEMPLE

KEVIN SERAPHIN


OTTO PORTER


MARTELL WEBSTER

DEJUAN BLAIR

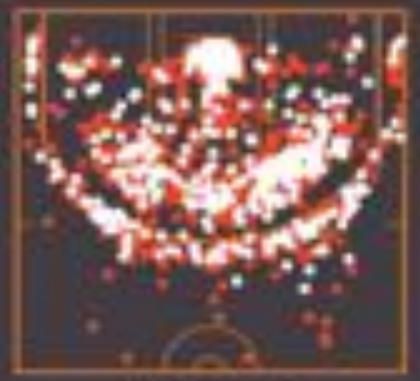
GLEN RICE JR

← Previous player

Next player →

John Wall

Guard



Shot chart

Top 3 shots taken

As a % of all taken

Jump shots	73%
Layups	24%
Dunks	3%

ALL SHOTS | SHOTS MADE | SHOTS MISSED

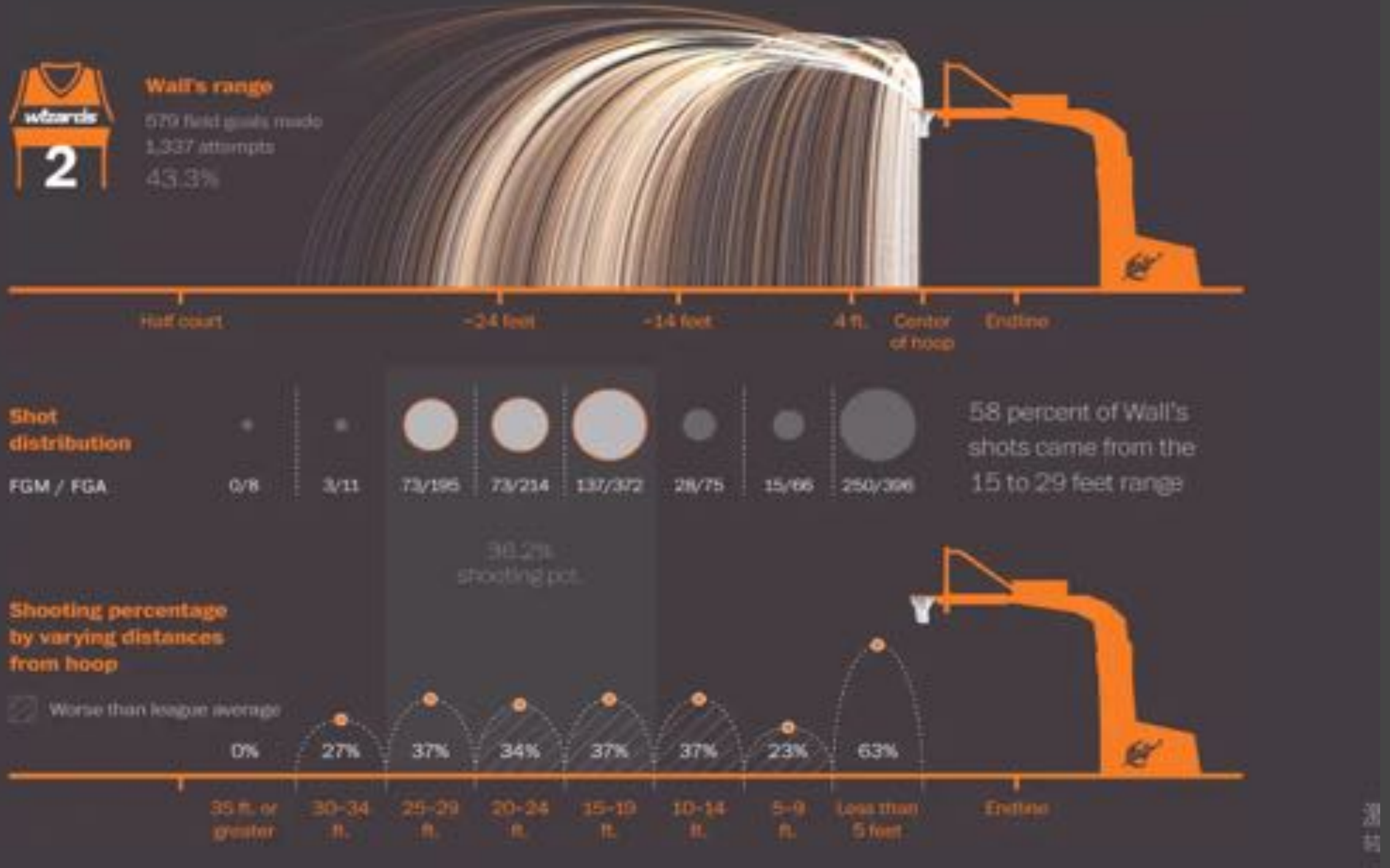
Better than league average

Comparable with

Worse than

Shooting by zone

激活 Windows


wizards
2
Wall's range
570 field goals made
1,337 attempts
43.3%
Half court
~24 feet
~14 feet
4 ft.
Center of hoop
Endline
Shot distribution
FGM / FGA
0/8
3/11
73/195
73/214
137/372
28/75
15/66
250/396
58 percent of Wall's shots came from the 15 to 29 feet range
30.2% shooting pct.
Shooting percentage by varying distances from hoop
Worse than league average
0%
27%
37%
34%
37%
37%
23%
63%
35 ft. or greater
30-34 ft.
25-29 ft.
20-24 ft.
15-19 ft.
10-14 ft.
5-9 ft.
Less than 5 feet
Endline

http://www.washingtonpost.com/wp-srv/special/sports/wizards-shooting-stars/

Thanks

Vis #69

https://www.youtube.com/watch?v=heZQjTkeW_g

Top Vis Competition Presentation. ZENG Cheng

What would happen if one woman told the truth
about her life?
The world would split open.

– Muriel Rukeyser, "Käthe Kollwitz"

Not only the top searching cities, you can also click the lighting point on the map to get more information about other cities.

You can choose a certain year to see the global searching trend and you can easily find overall trend of searching volume.

Me Too Rising
A visualization of the movement from Google Trends
Sexual assault resources
Top searching cities
Chicalim
Brahmapur
Angul
Zirakpur
Wardha
It is quite obviously to see which countries suffered from this problem seriously.
Google Trends
Privacy & Terms
Trending searches over time

You can also choose a certain time to see the different search result in this city.

Thanks for watching.

https://metoorising.withgoogle.com/

Vis #70

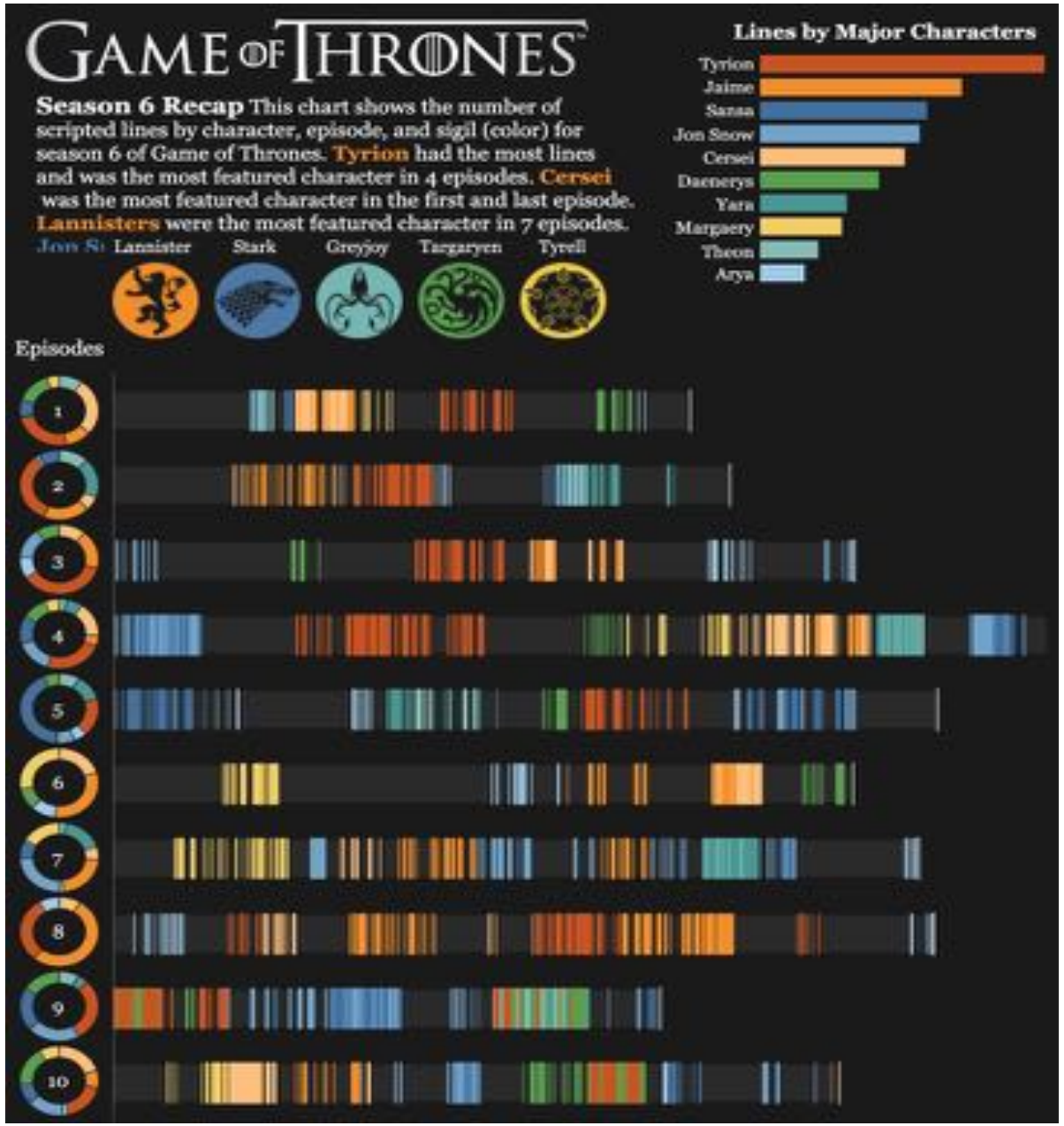
https://youtu.be/OtMaJ1TgyCA

Zhang Danping

Game of Thrones Recap

THE GREATEST VISUALIZATION

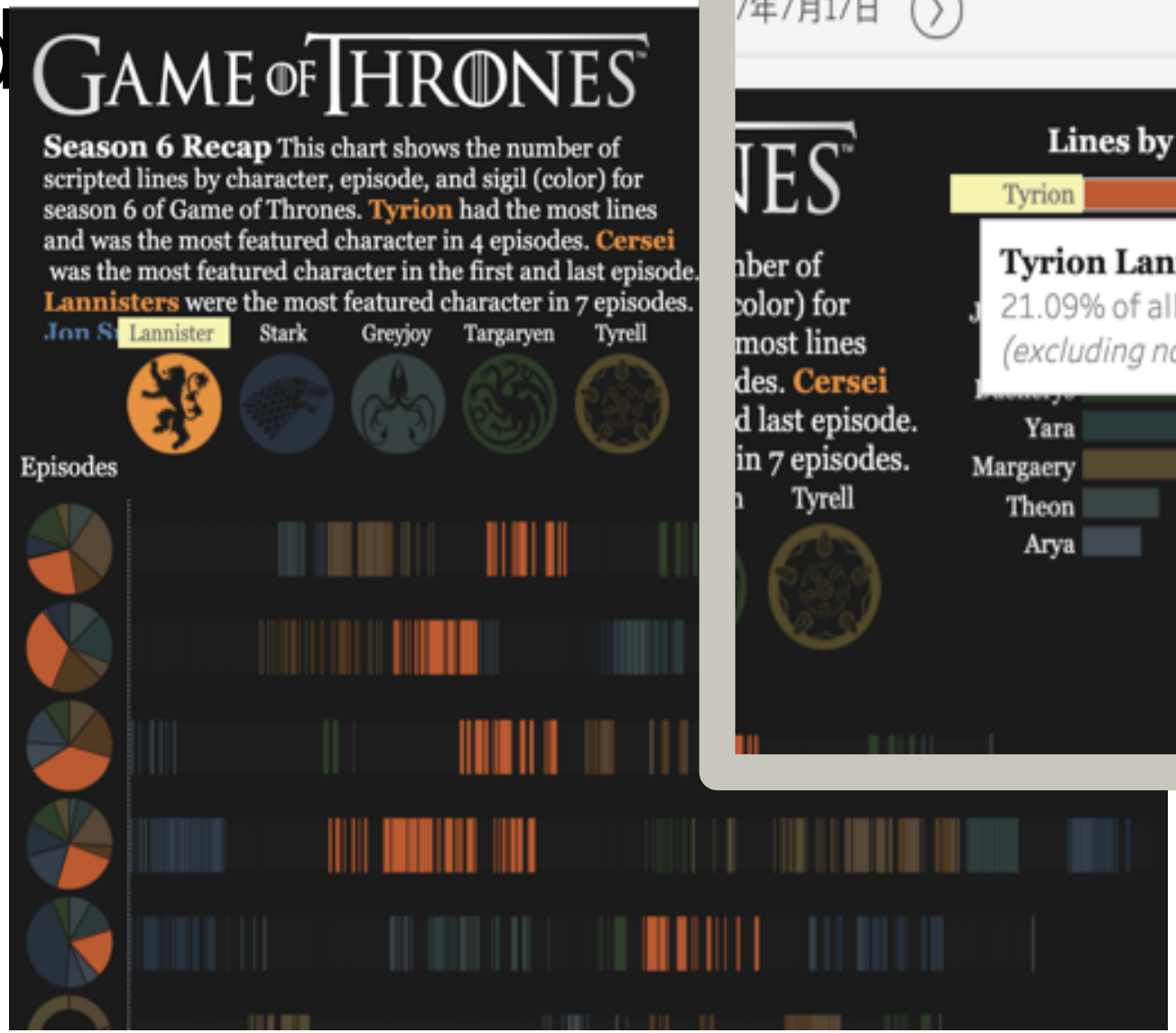
REPORTED BY : ZHANG DANPING

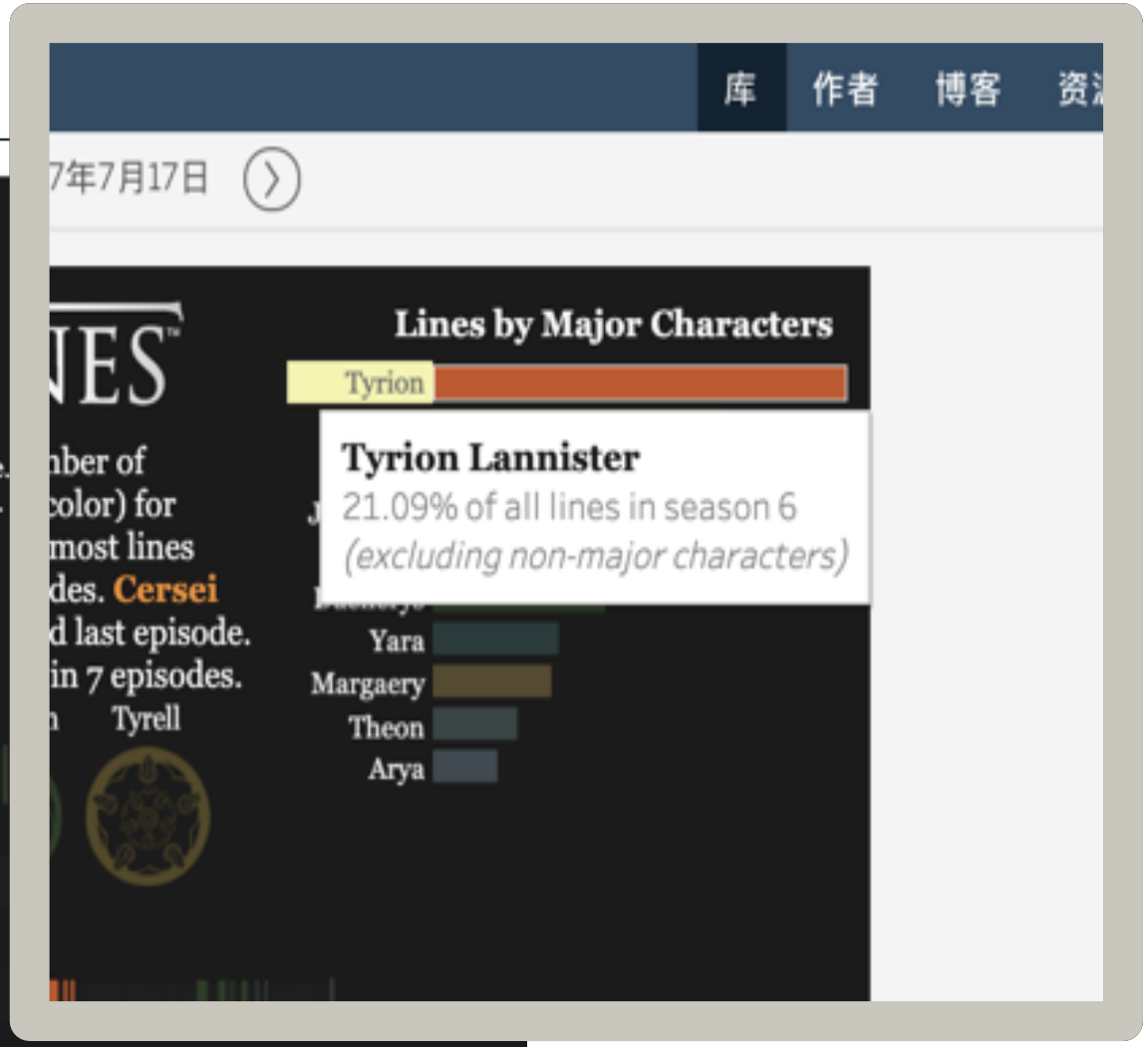


This is the full view of the interactive chart, which shows the number of scripted lines by character, episode, and sigil (color) for season 6 of Game of Thrones.

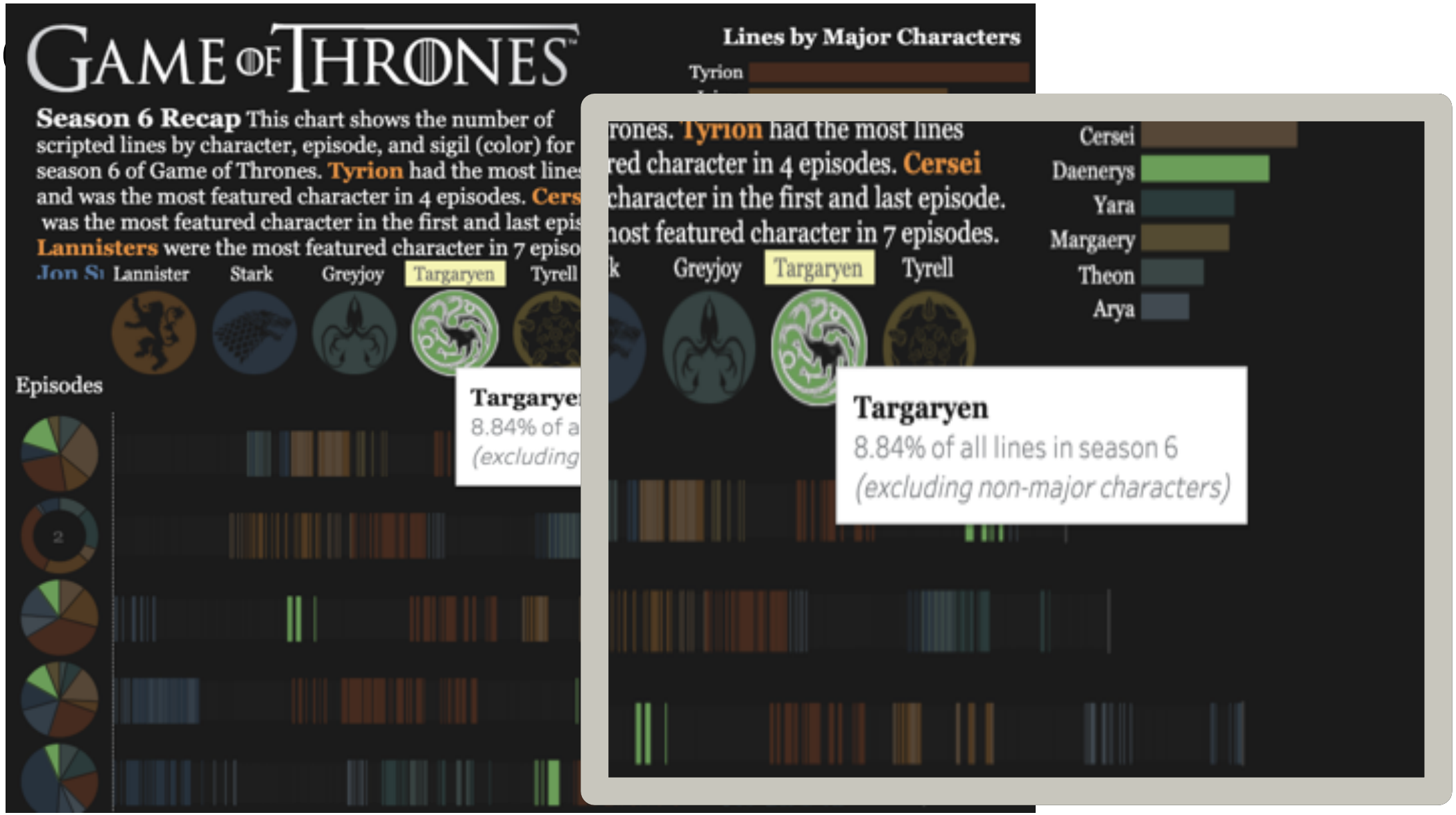
https://public.tableau.com/zh-cn/gallery/game-thrones-season-6-review?gallery=featured

See some d

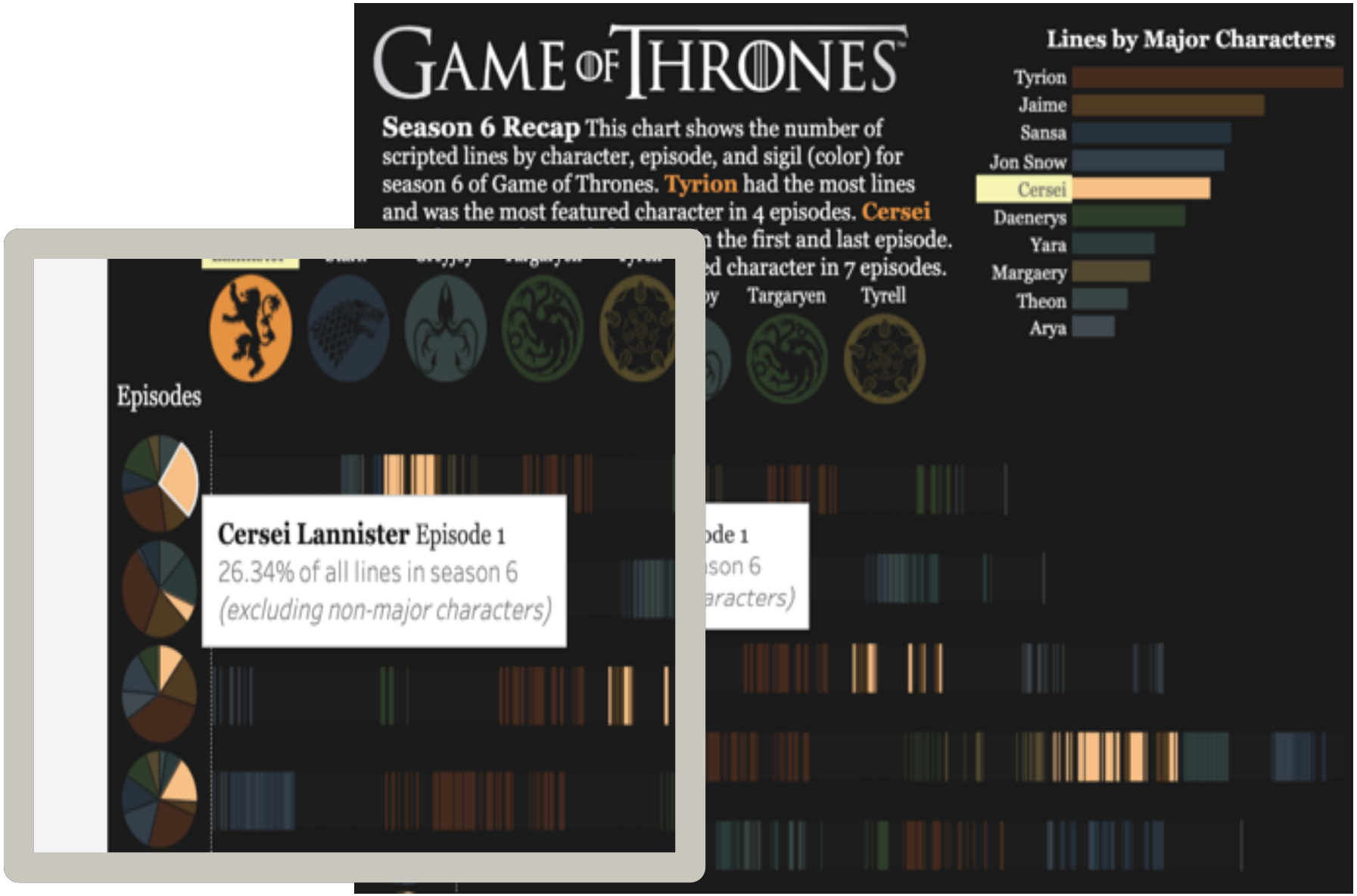

GAME OF THRONES
Season 6 Recap This chart shows the number of scripted lines by character, episode, and sigil (color) for season 6 of Game of Thrones. Tyrion had the most lines and was the most featured character in 4 episodes. Cersei was the most featured character in the first and last episode. Lannisters were the most featured character in 7 episodes.
Lannister
Stark
Greyjoy
Targaryen
Tyrell
Episodes


库
作者
博客
7年7月17日
Lines by Major Characters
Tyrion
Tyrion Lannister
21.09% of all lines in season 6
(excluding non-major characters)
Yara
Margaery
Theon
Arya
Tyrell

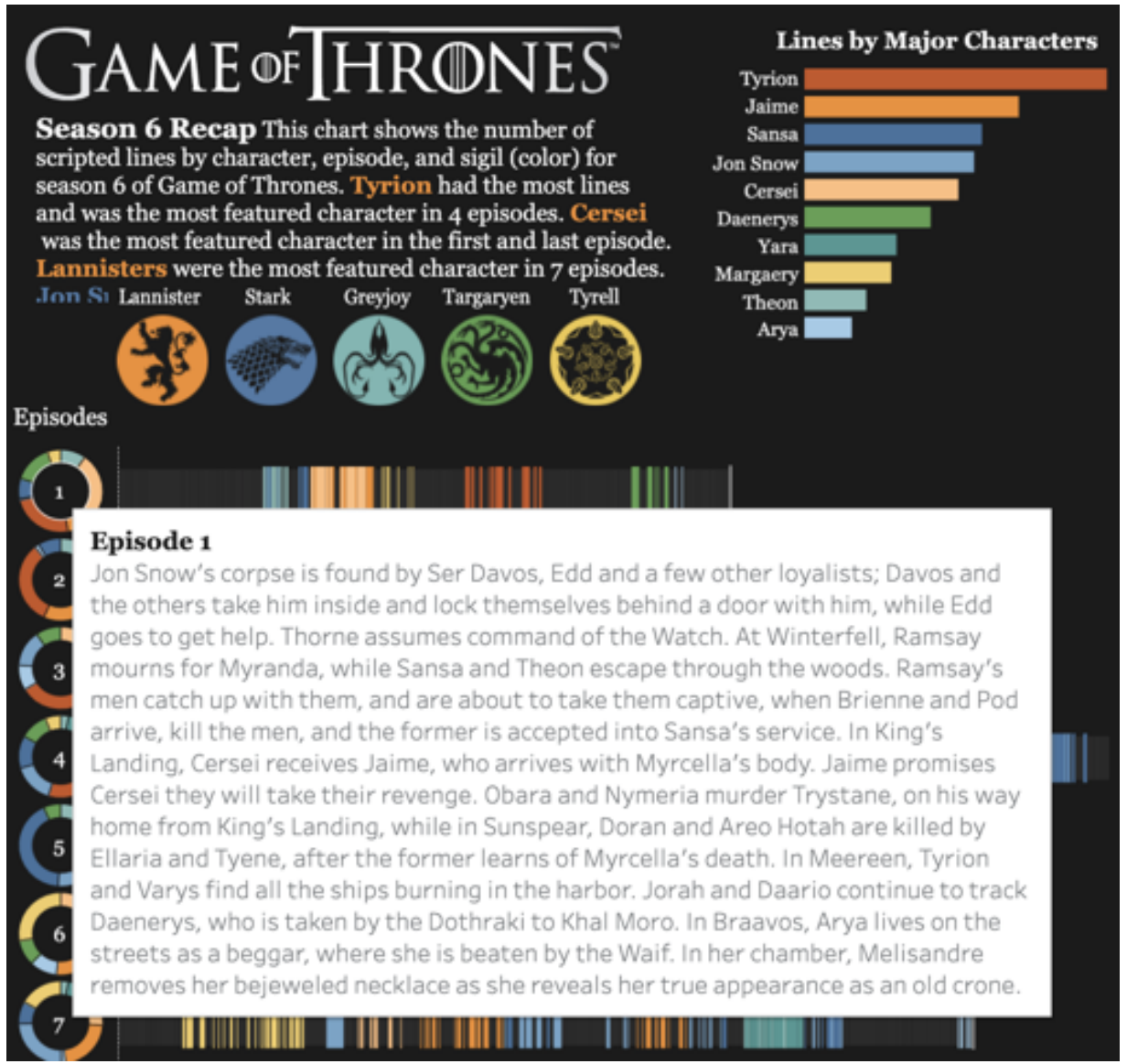
See some d


GAME OF THRONES
Season 6 Recap This chart shows the number of scripted lines by character, episode, and sigil (color) for season 6 of Game of Thrones. Tyrion had the most lines and was the most featured character in 4 episodes. Cersei was the most featured character in the first and last episode. Lannisters were the most featured character in 7 episodes.
Lannister
Stark
Greyjoy
Targaryen
Tyrell
Episodes
Lines by Major Characters
Tyrion
Cersei
Daenerys
Yara
Margaery
Theon
Arya
Targaryen
8.84% of all lines in season 6
(excluding non-major characters)

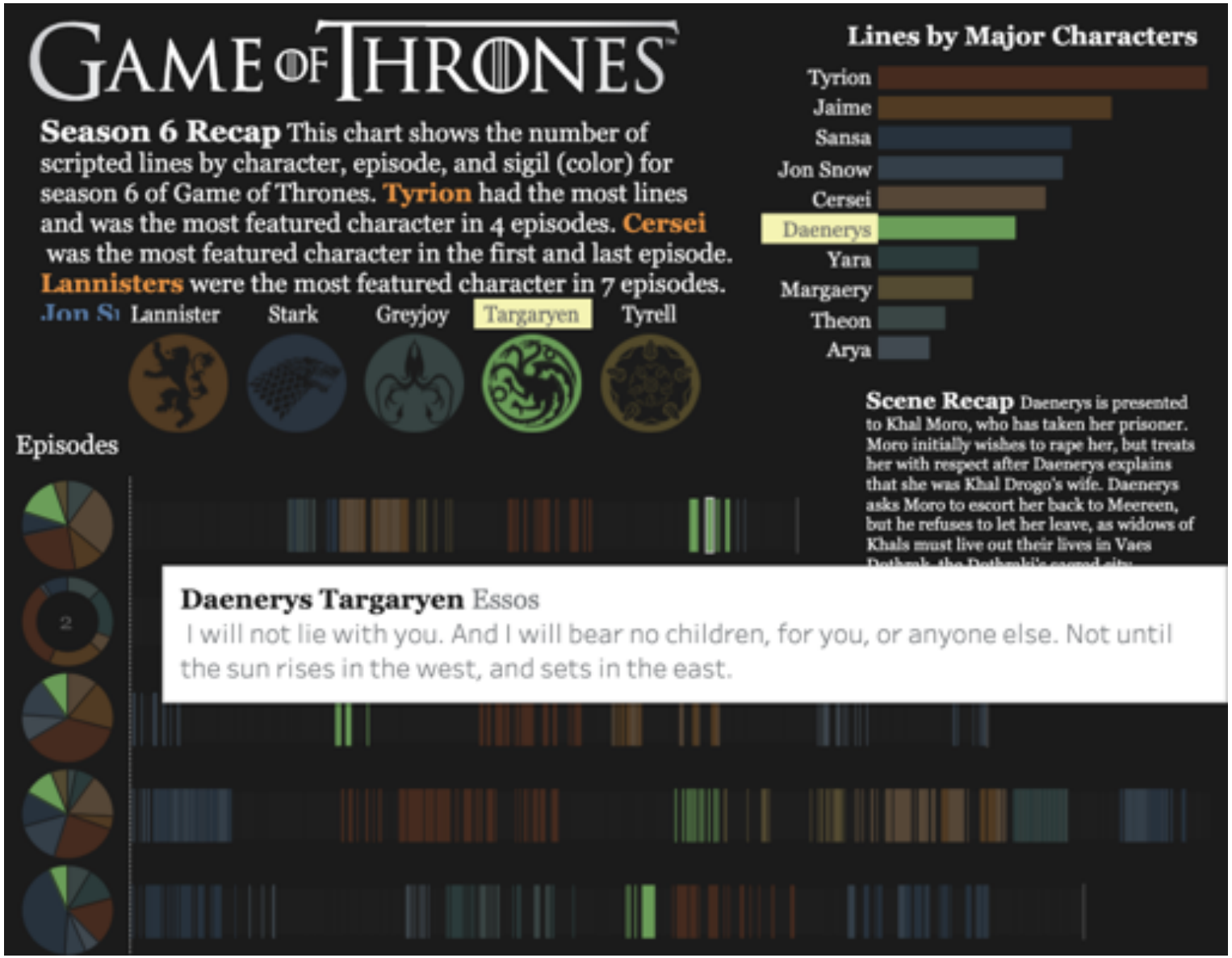
See some details



See some details



See some details



Thank you for listening.

THE GREATEST VISUALIZATION

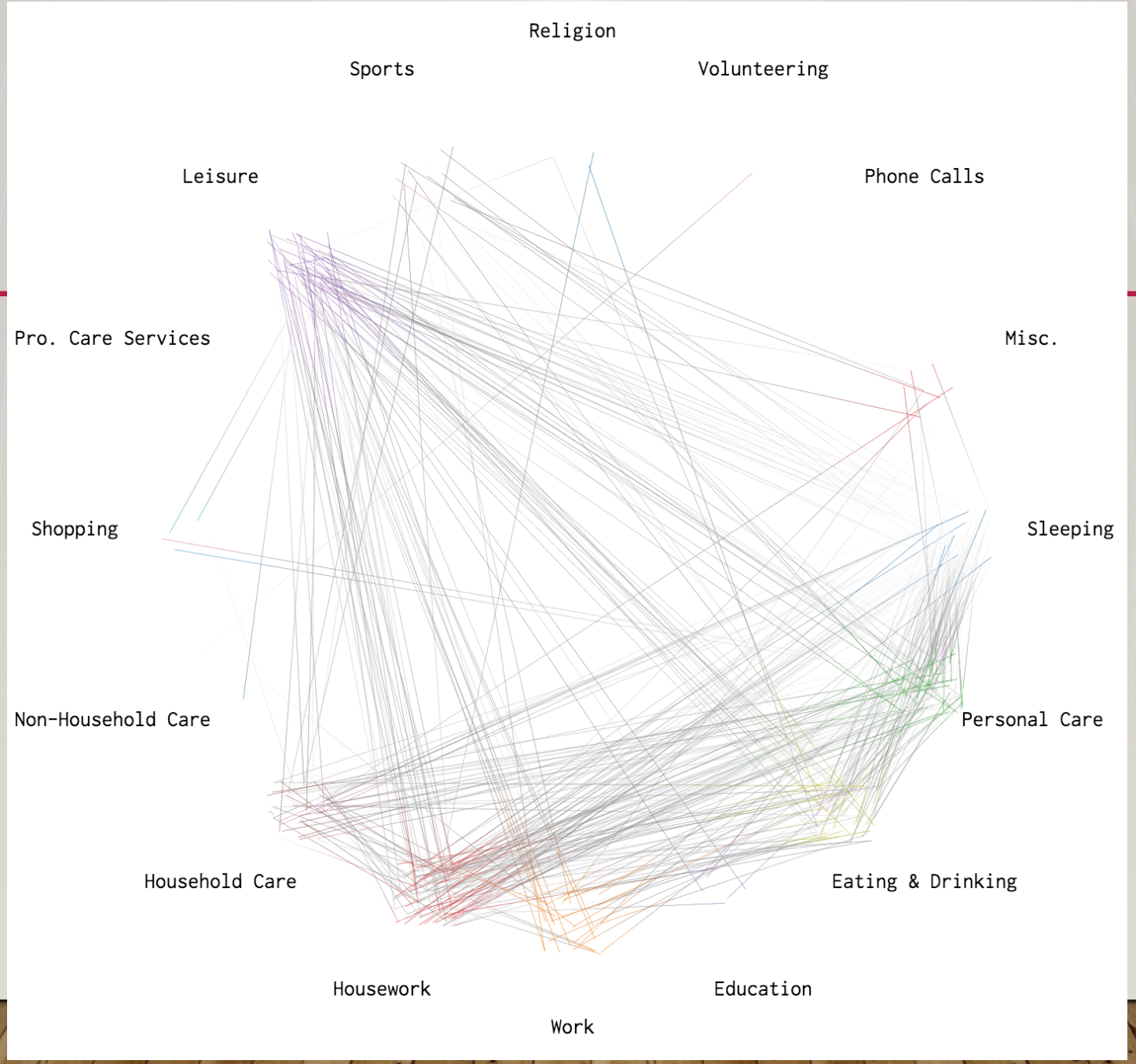
REPORTED BY : ZHANG DANPING

Vis #71

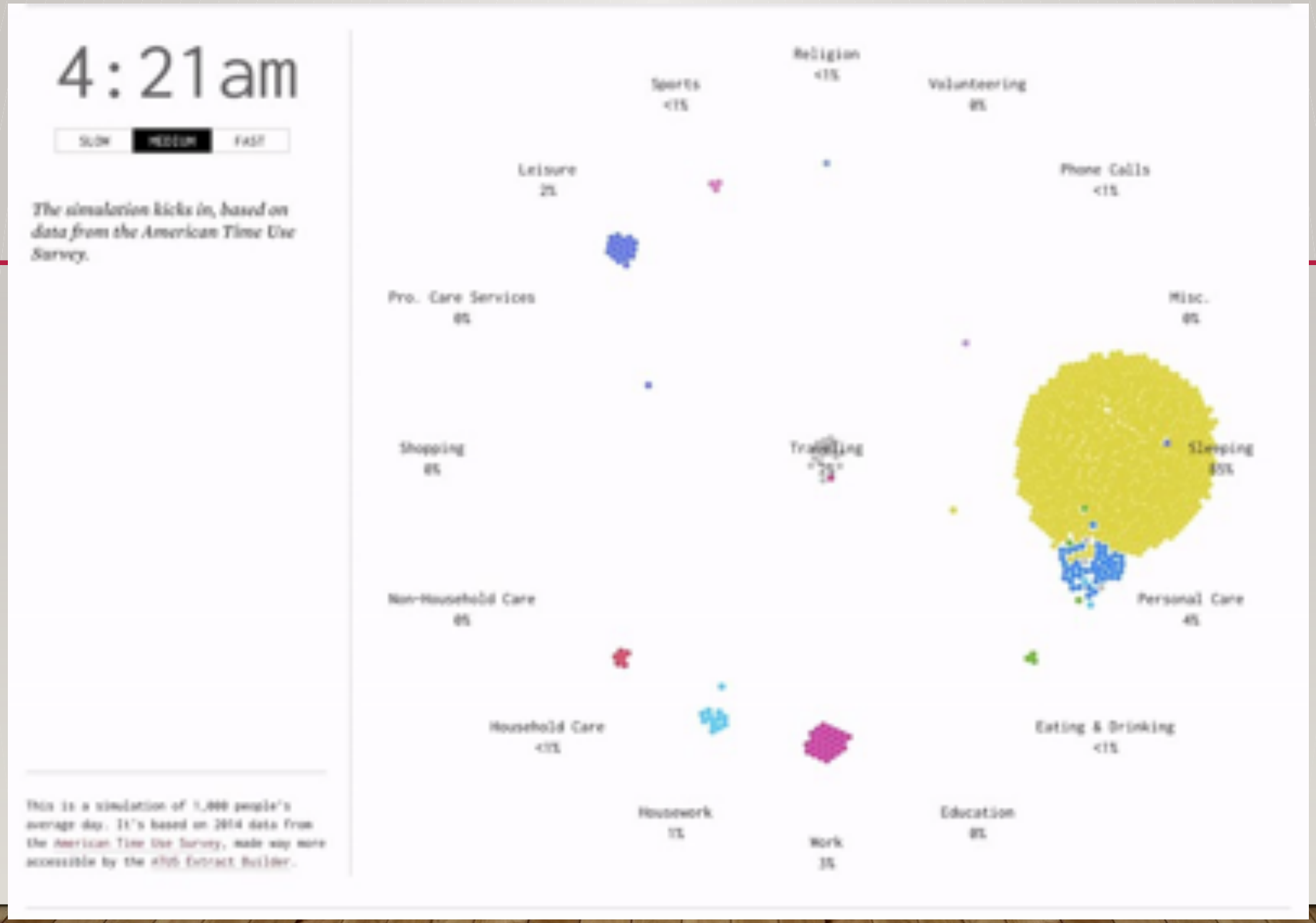
https://www.youtube.com/watch?v=_lMU_ndpLVk

A DAY IN THE LIFE OF AMERICANS

ZHANG GUANNAN



https://i0.wp.com/flowingdata.com/wp-content/uploads/2015/12/1-



https://flowingdata.com/2015/12/15/a-day-in-the-life-of-americans/

Vis #72

https://youtu.be/UoMX3tgBQkA

3D Map of London Air Quality

An Impressive Data Visualization in Interactive Mapping

Student Name: ZHANG MENGYAO

Student ID: 20619259

Contents

01 SOURCE OF CASE

02 INTERFACE OVERVIEW

03 ENCODING SCHEME

04 IMPRESSIVE POINTS

SOURCE OF CA
SE

parallel

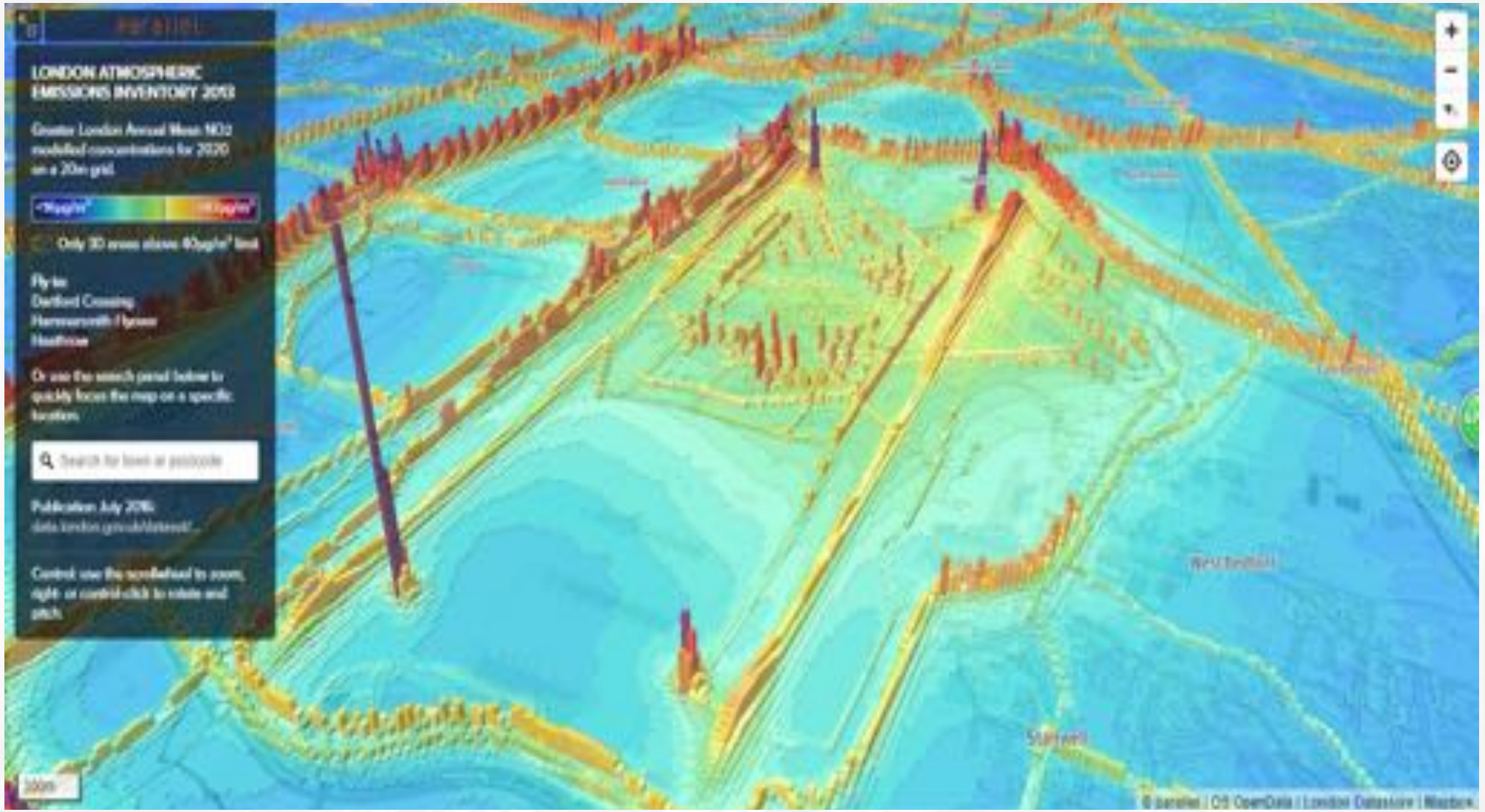
https://parallel.co.uk/

A design-led web application specializing in interactive mapping and data visualization.

Project: LONDON ATMOSPHERIC EMISSIONS INVENTORY 2013

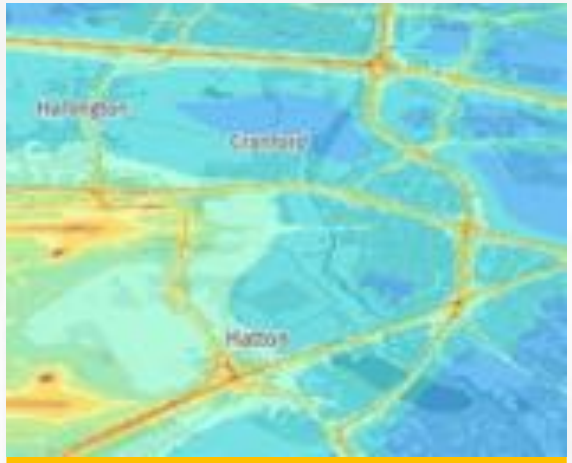
Modelled concentrations of key pollutants(NO2, NOx, PM10, PM10d and PM2.5) in 2013 at 20m grid level.

INTERFACE OVERVIEW



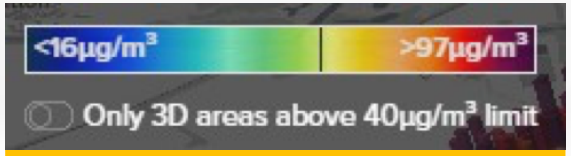
https://parallel.co.uk/3D/laei-no2/#13.27/51.47176/-0.4615/64/60

ENCODING SCHEME



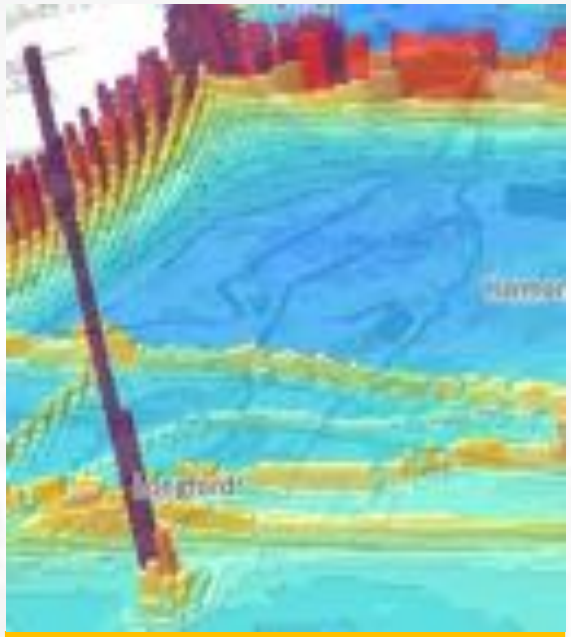
Spatial region

Adding actual data to real city map does a better job. e.g. The pollution alongside roads are generally more serious than the other places.



Color hue

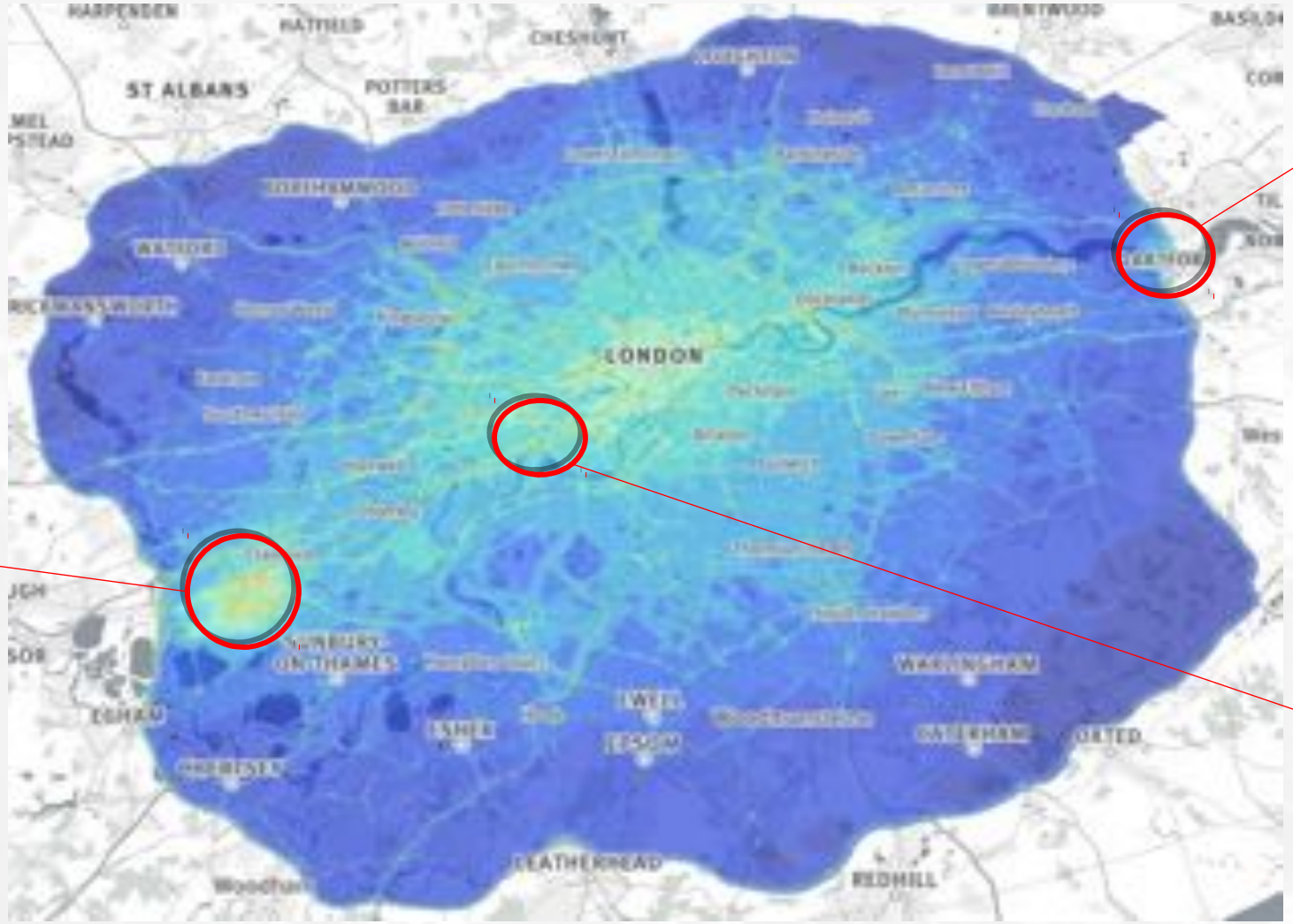
Use the spectrum approximation to represent different level of air pollution.
Less polluted: blue/green… (health, relax, environment, harmony…)
More polluted: yellow/orange/red/purple…(dangers, warnings, anxiety, disaster…).



Height/Depth

The higher a 3D cube is, the more serious the air in that spot has been polluted.

ENCODING SCHE
ME



Dartford Cross River Road

Heathrow Airport

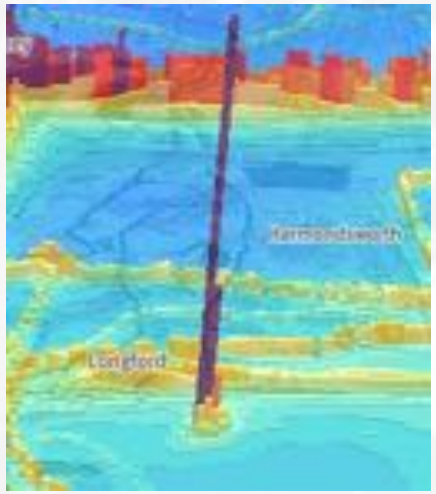
Hammersmith Flyover

IMPRESSIVE POINTS – 3D

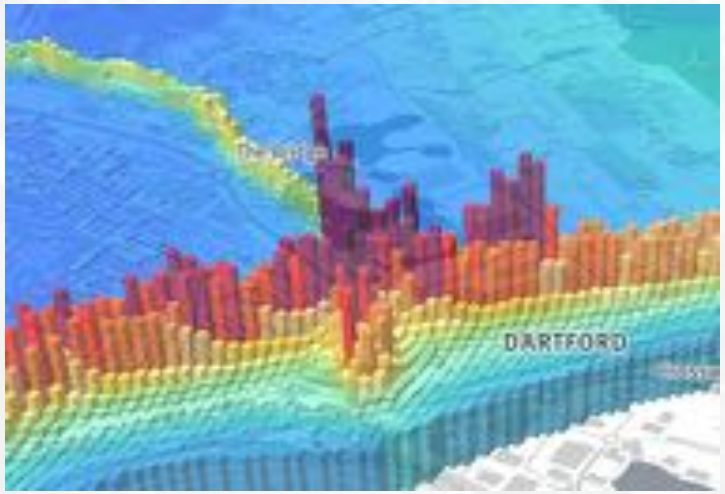
2D: can not reflect changes and concentration of various pollutants in the city.

3D: pollution levels are represented by the height and color of 3D “buildings” on map.

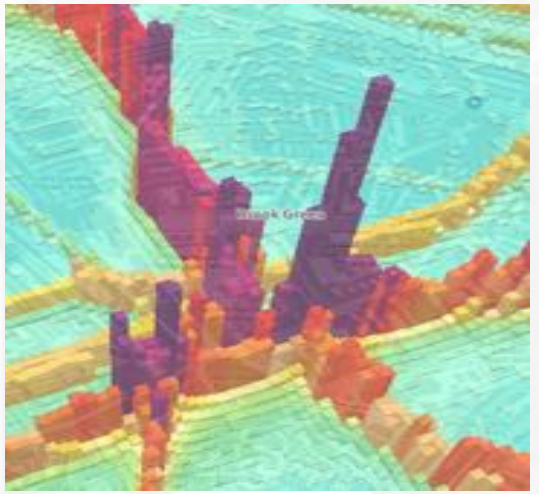
From a bird's eye view, we can see clearly which parts are more polluted, with a strong visual impact and a sense of pressure from the closer distance and warmer colors.



The end of the runway at Heathrow Airport



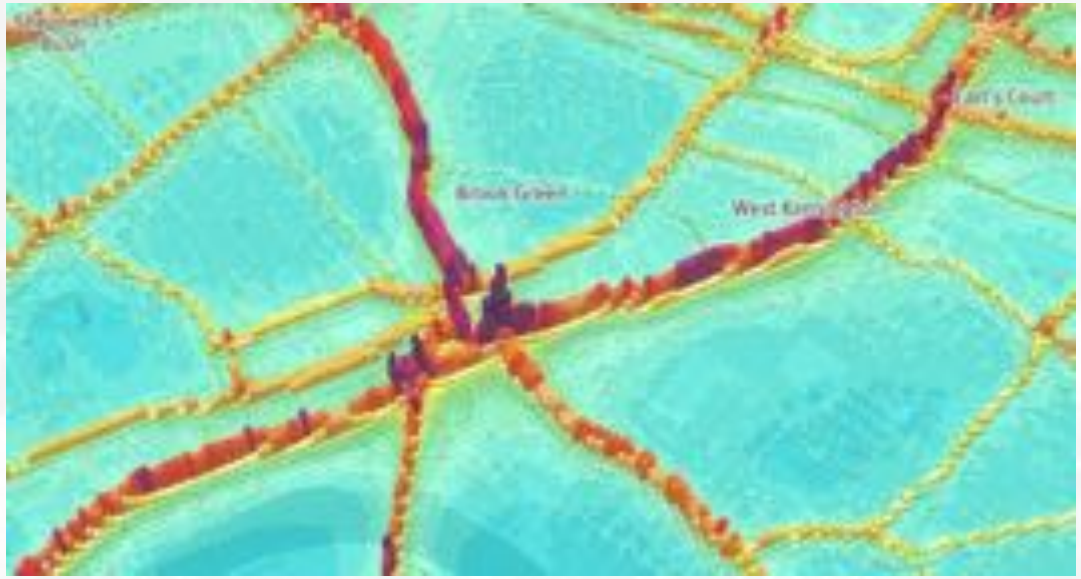
The junction between the river and the road on the Dartford Cross River Road



The intersection of the Hammersmith Flyover

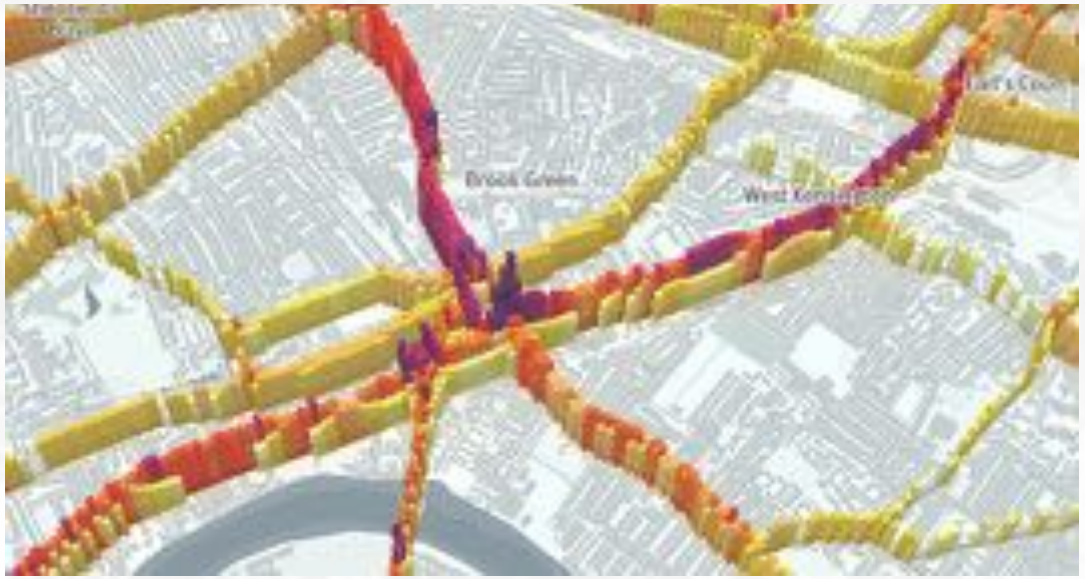
IMPRESSIVE POINTS - Threshold

Only 3D areas above 40µg/m³ limit



All areas are displayed

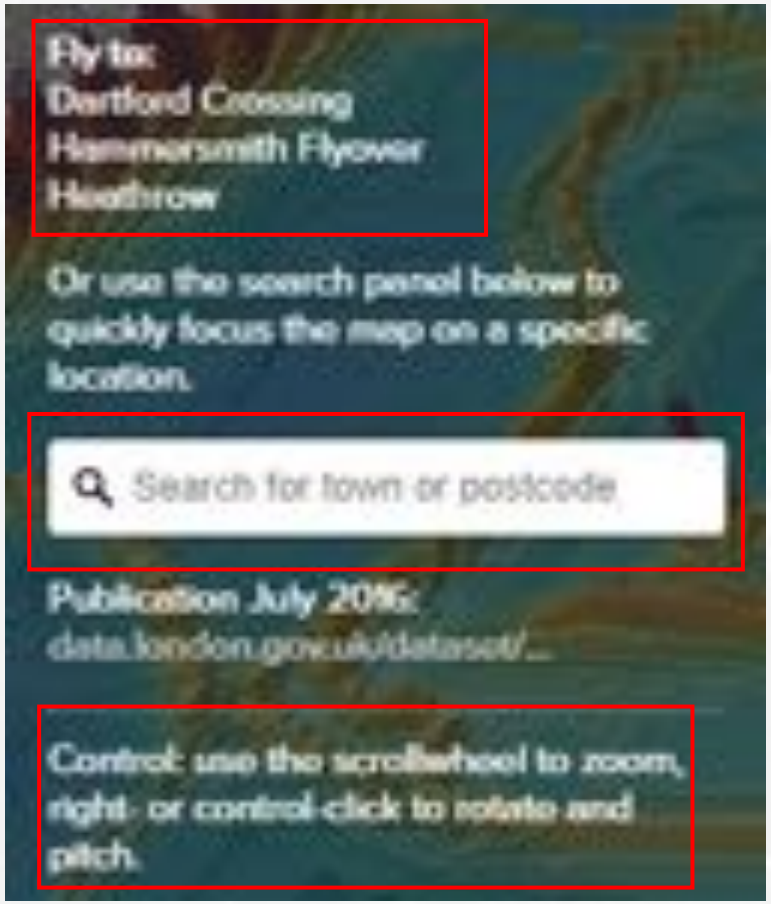
Only 3D areas above 40µg/m³ limit



Only 3D areas above 40µg/m³ limit

Setting an AQG as 40 milligrams per liter, as the pollution levels above it are harmful and worthy noticing.

IMPRESSIVE POINTS - Interactive



Move to some typical locations

Search other places of London

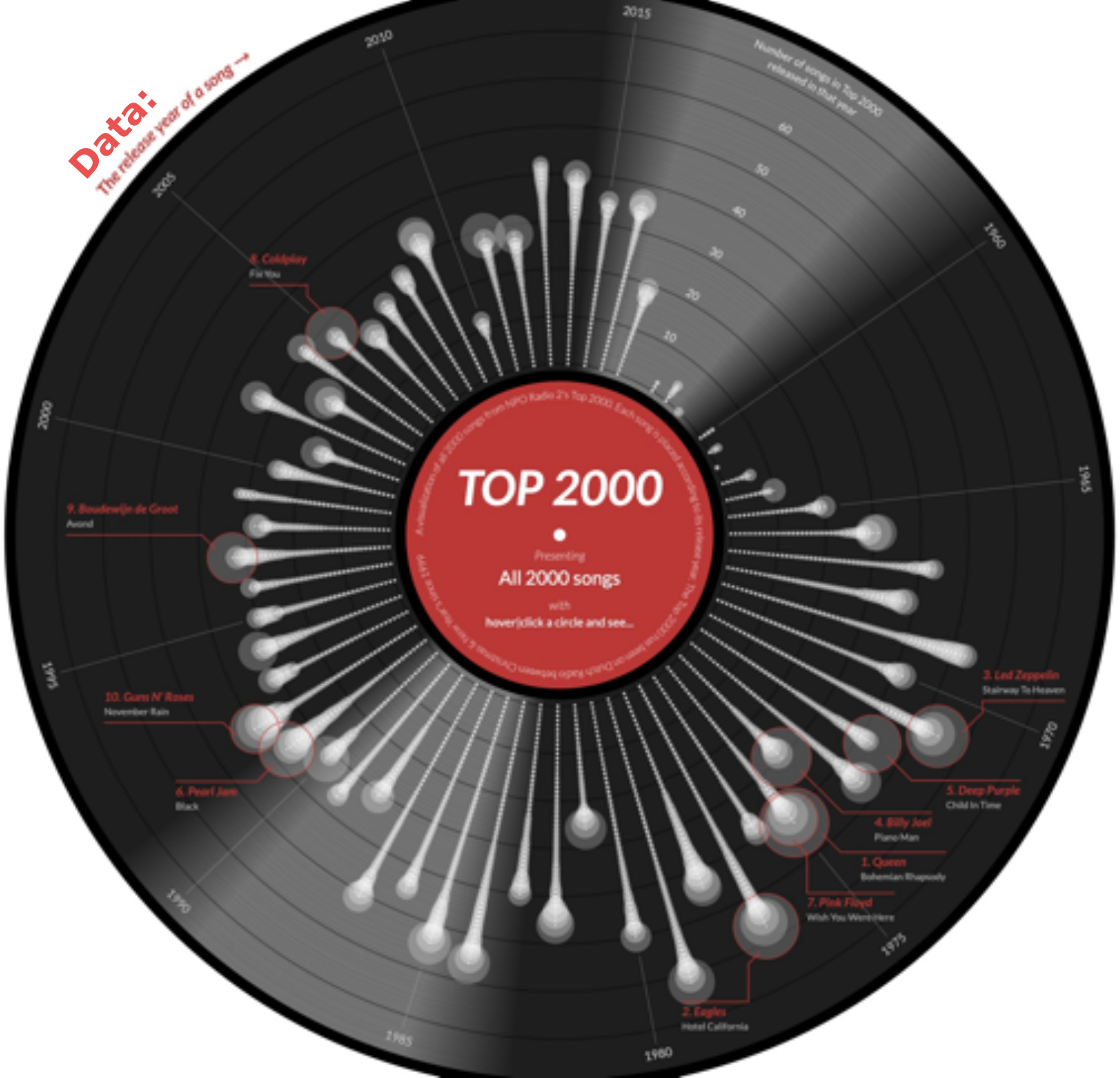
Zoom-in & zoom-out, drag/move, rotate & pitch, find my location

THANK YOU

Vis #73

https://youtu.be/zJd8wArArOI

ZHANG XUEYAN

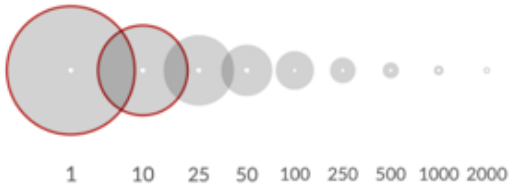


Let the Music Play

This visualization shows all songs from the TOP 2000 of 2017 according to their release years.

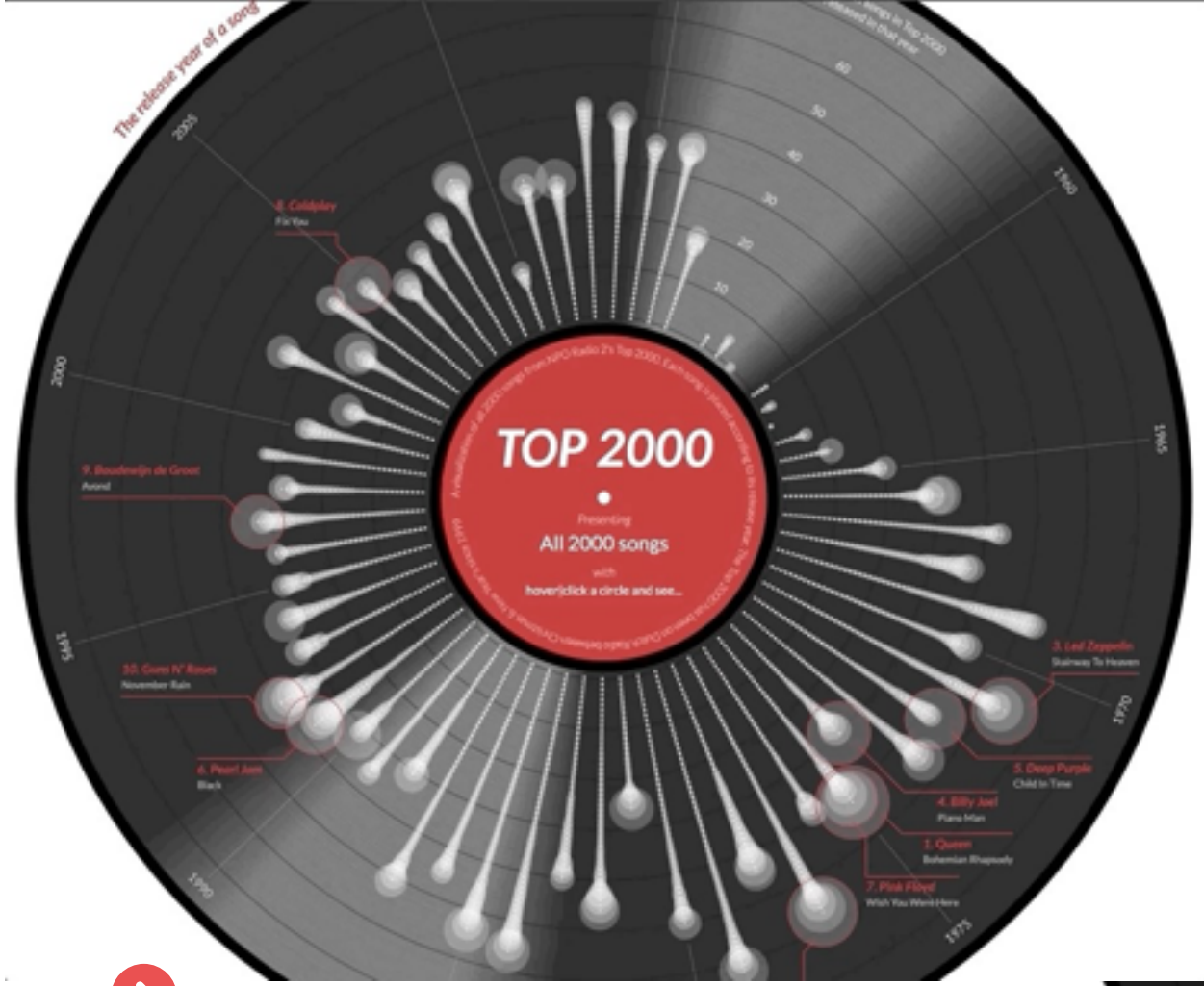
Encoding:

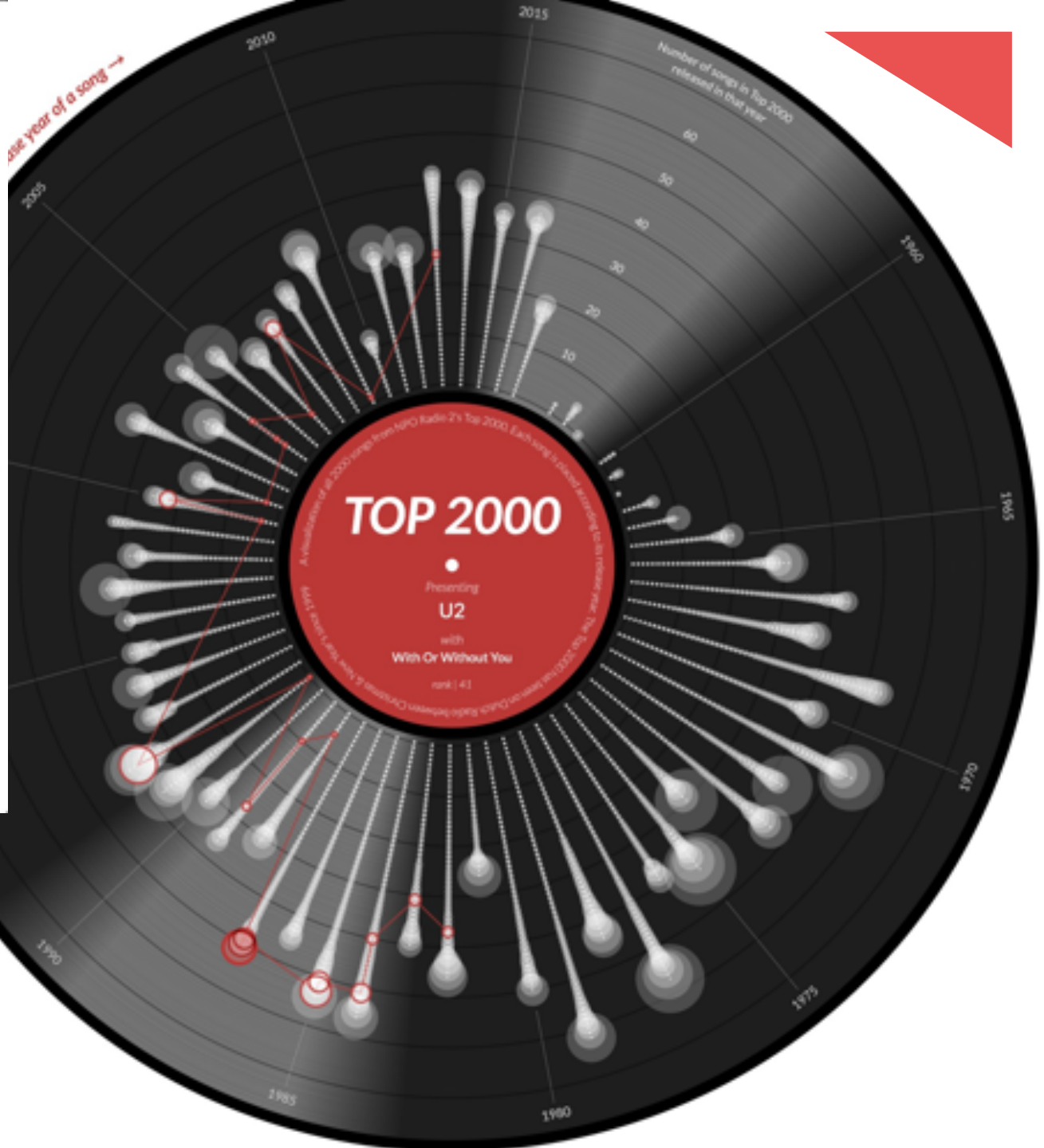
Position in the Top 2000



Created by
https://twitter.com/NadiehBremer
http://www.visualcinnamon.com/

Data from
http://www.nporadio2.nl/top2000





- When hovering(or clicking on the disk) , all the songs of the artist will be highlighted and connected by a line.

- When the song happens to be a collaboration between two artists, you'll see multiple lines, one for each

Vis #74

https://youtu.be/6WkFXE6-9pA

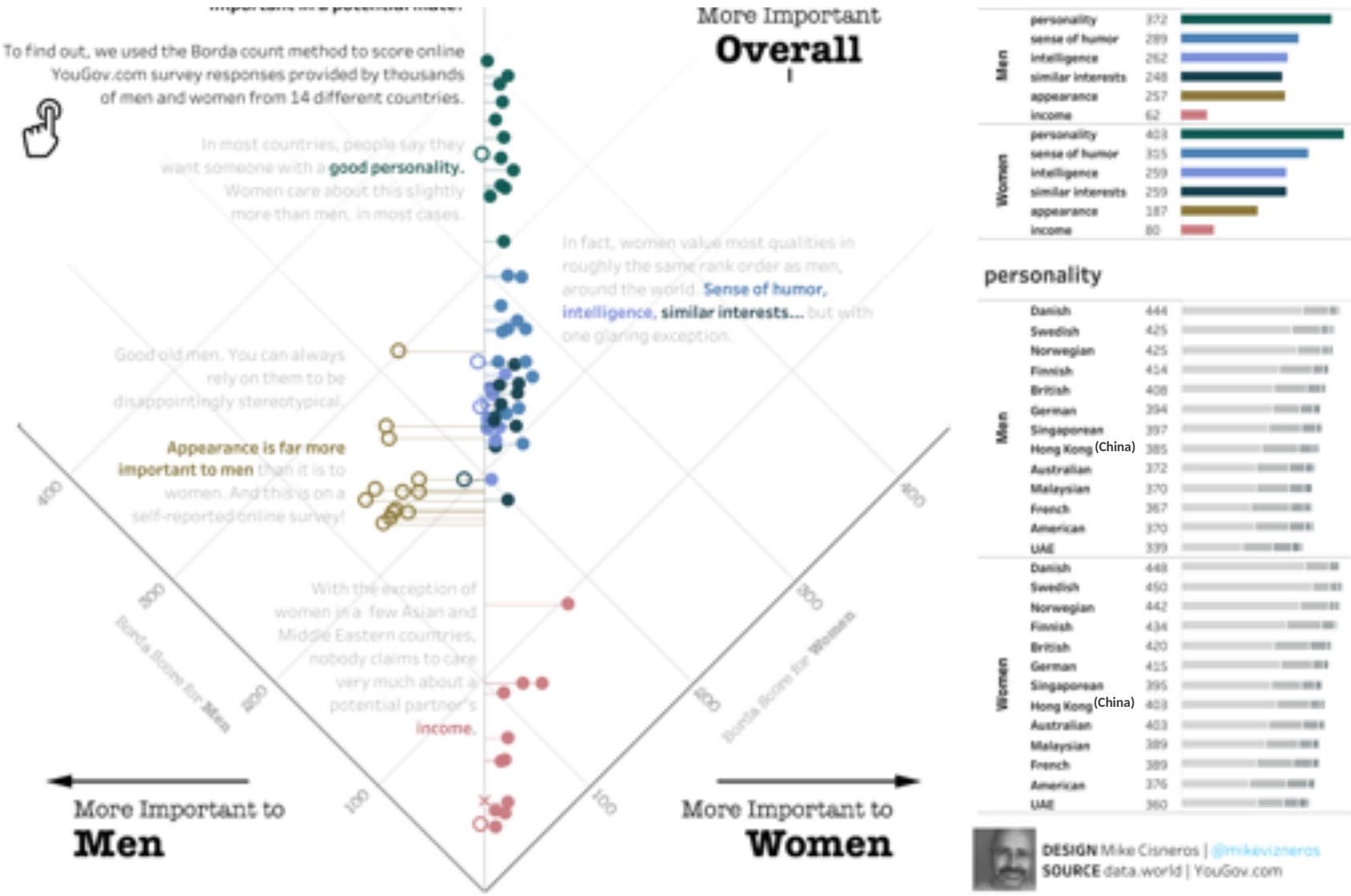
Zhang Ying

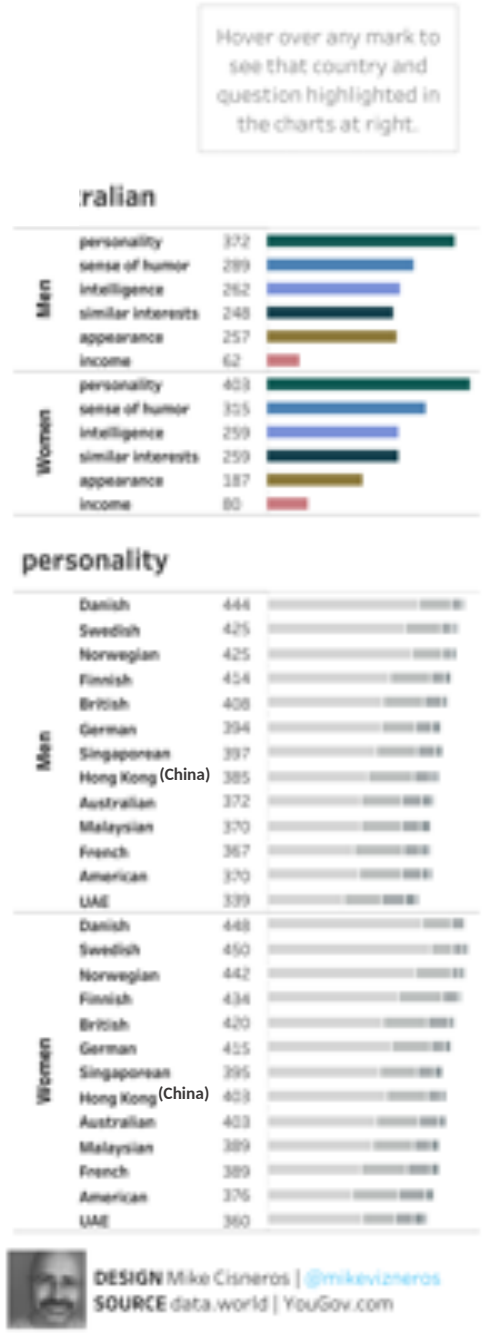
Top Vis Competition

ZHANG Ying
20619302

Ref: https://www.makeovermonday.co.uk

What We Say We Look For In a Partner





Encoding Scheme
Mark:

- points: men/women from a country;

Channels:

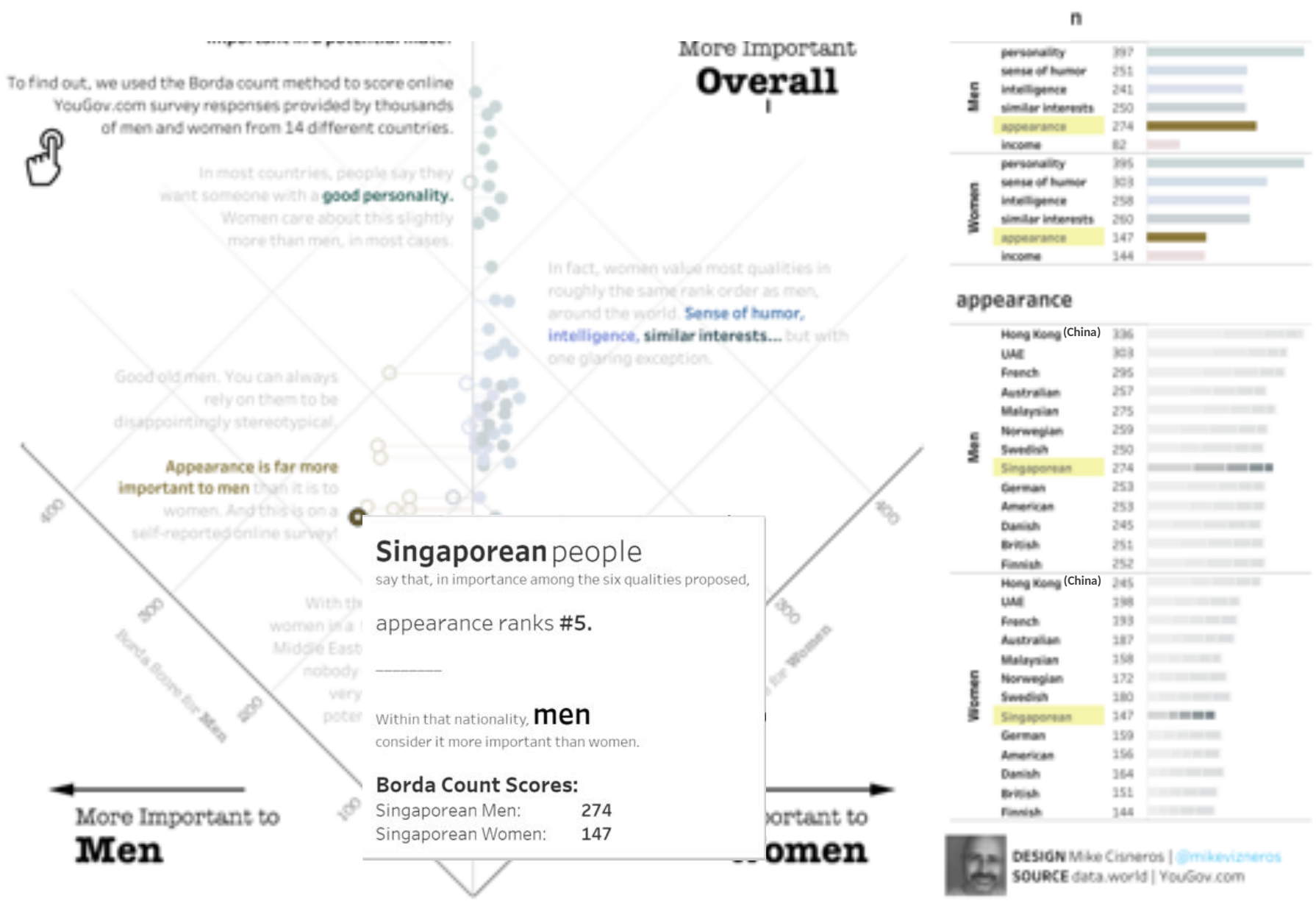
- position: degree of importance
- color: six different factors;
- shape: the gender.

Reasons

- 45 degrees scatter plot and 3 directions;
- annotations: key words in sentences;
- detail: tooltips and specify categories.

Ref:
https://public.tableau.com/views/WhatWeSayWeLookFor/WhatWeSayWeLookForInaPartner?:embed=y&:display_count=yes?:sh

What We Say We Look For In a Partner



What We Say We Look For In a Partner

Hover over any mark to see that country and question highlighted in the charts at right.

To find out, we used the Borda count method to score online YouGov.com survey responses provided by thousands of men and women from 14 different countries.

In most countries, people say they want someone with a **good personality.** Women care about this slightly more than men, in most cases.

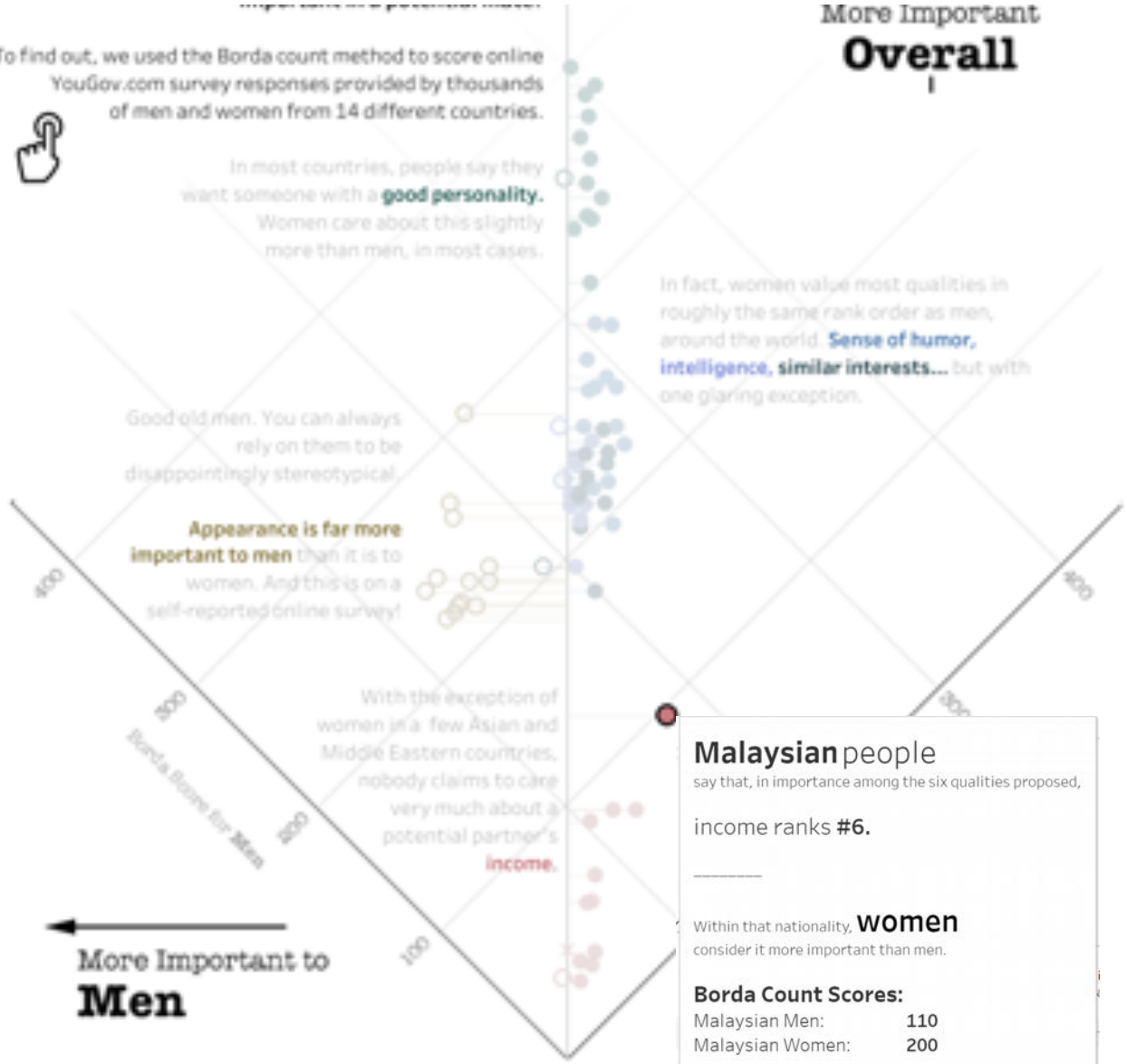
Good old men. You can always rely on them to be disappointingly stereotypical.

Appearance is far more important to men than it is to women. And this is on a self-reported online survey!

With the exception of women in a few Asian and Middle Eastern countries, nobody claims to care very much about a potential partner's **income.**

More Important **Overall**

In fact, women value most qualities in roughly the same rank order as men, around the world. **Sense of humor, intelligence, similar interests...** but with one glaring exception.



More Important to **Men**

Malaysian people
say that, in importance among the six qualities proposed,

income ranks **#6.**

Within that nationality, **women**
consider it more important than men.

Borda Count Scores:

Malaysian Men:	110
Malaysian Women:	200

income

DESIGN Mike Cisneros | @mikevizneros
SOURCE data.world | YouGov.com

Vis #75

https://youtu.be/9JC1c0Q7ib8

ZHAO Hanrong

Visualizing Healthcare Spending by Country - Iman Gosh

MSBD 5005 Top Vis Competition

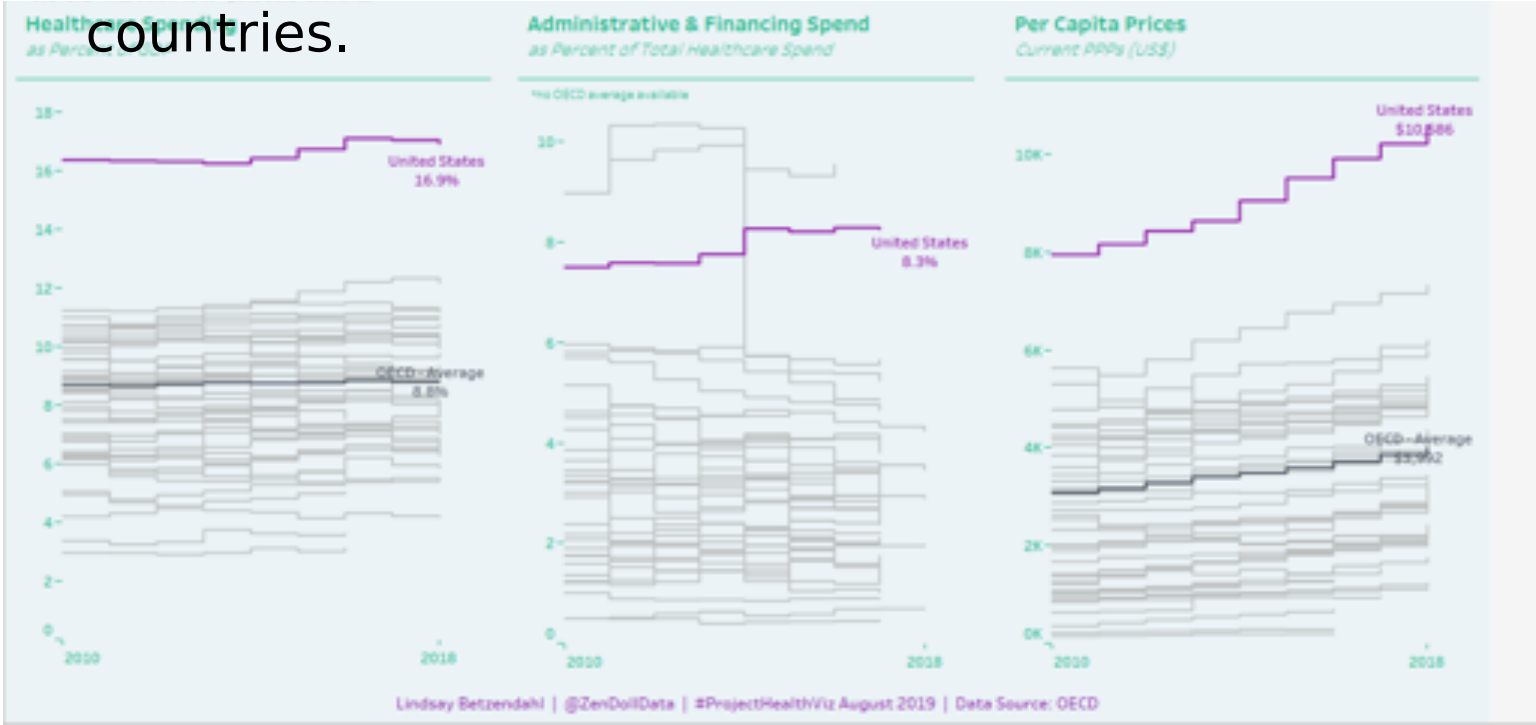
ZHAO Hanrong 20617184

09/11/2019

https://www.visualcapitalist.com/how-much-do-oecd-countries-spend-on-healthcare/

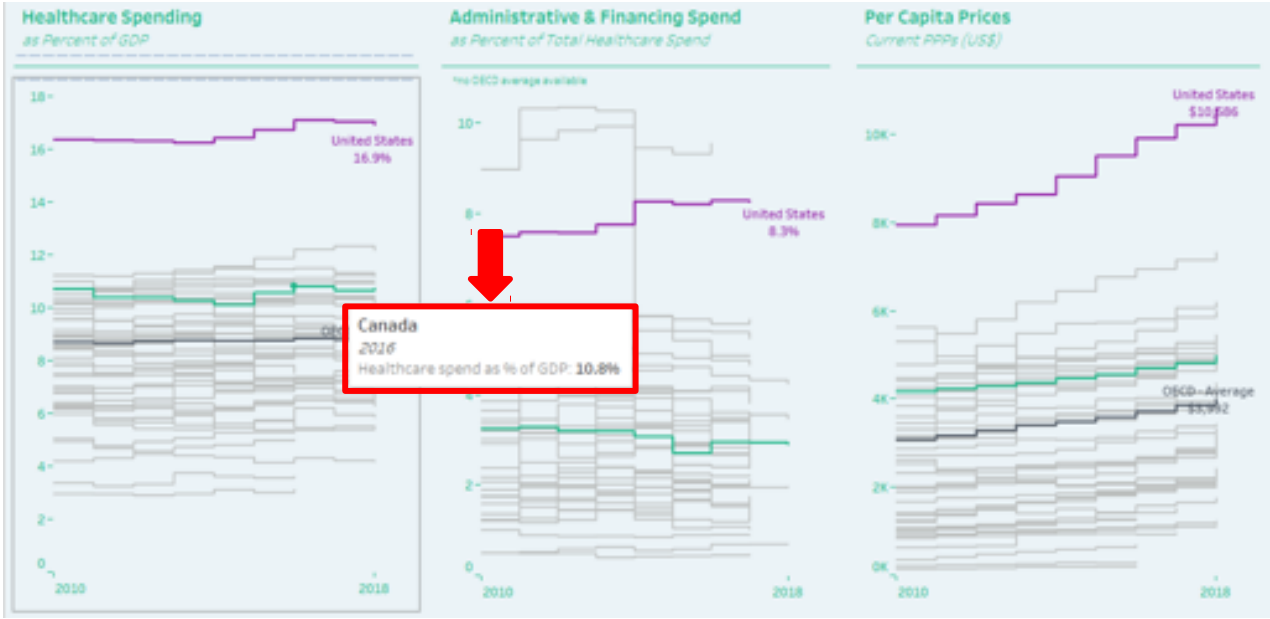
Overview

➔ Main task: Compare healthcare spending among OECD countries.



Rules of Thumb

- ➔ 2D plot - avoid over hue;
- ➔ Follow eyes beat memory;



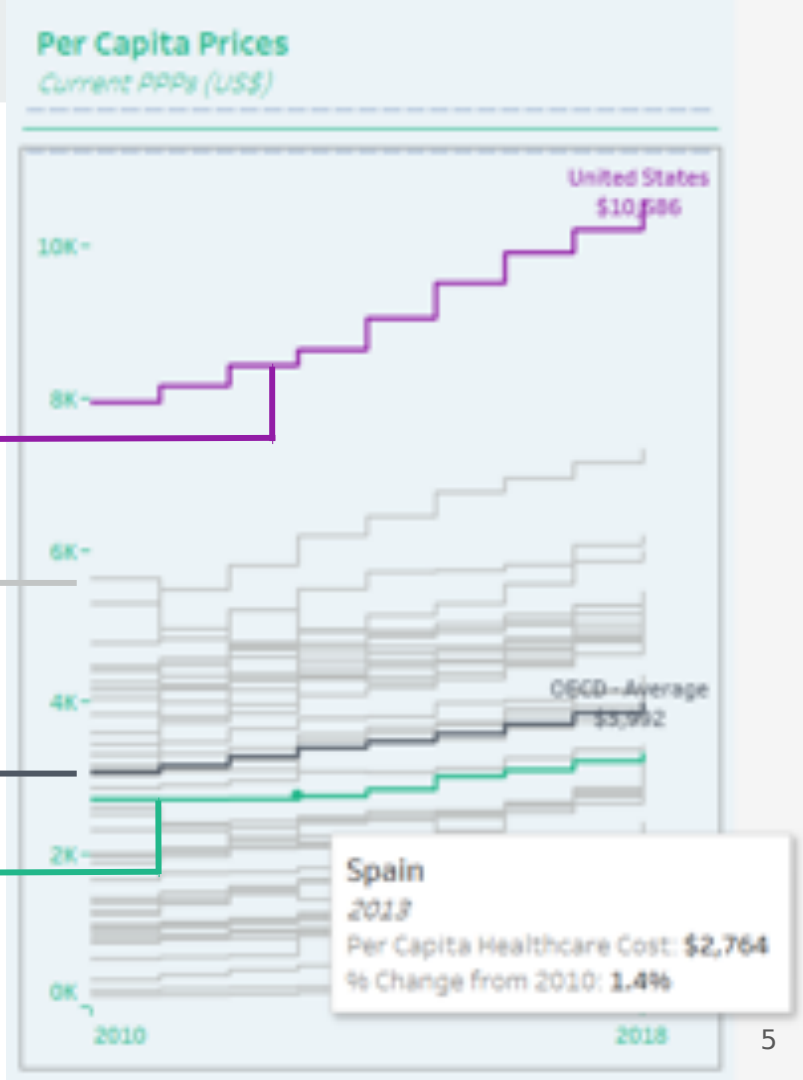
Color

United States

Not chosen

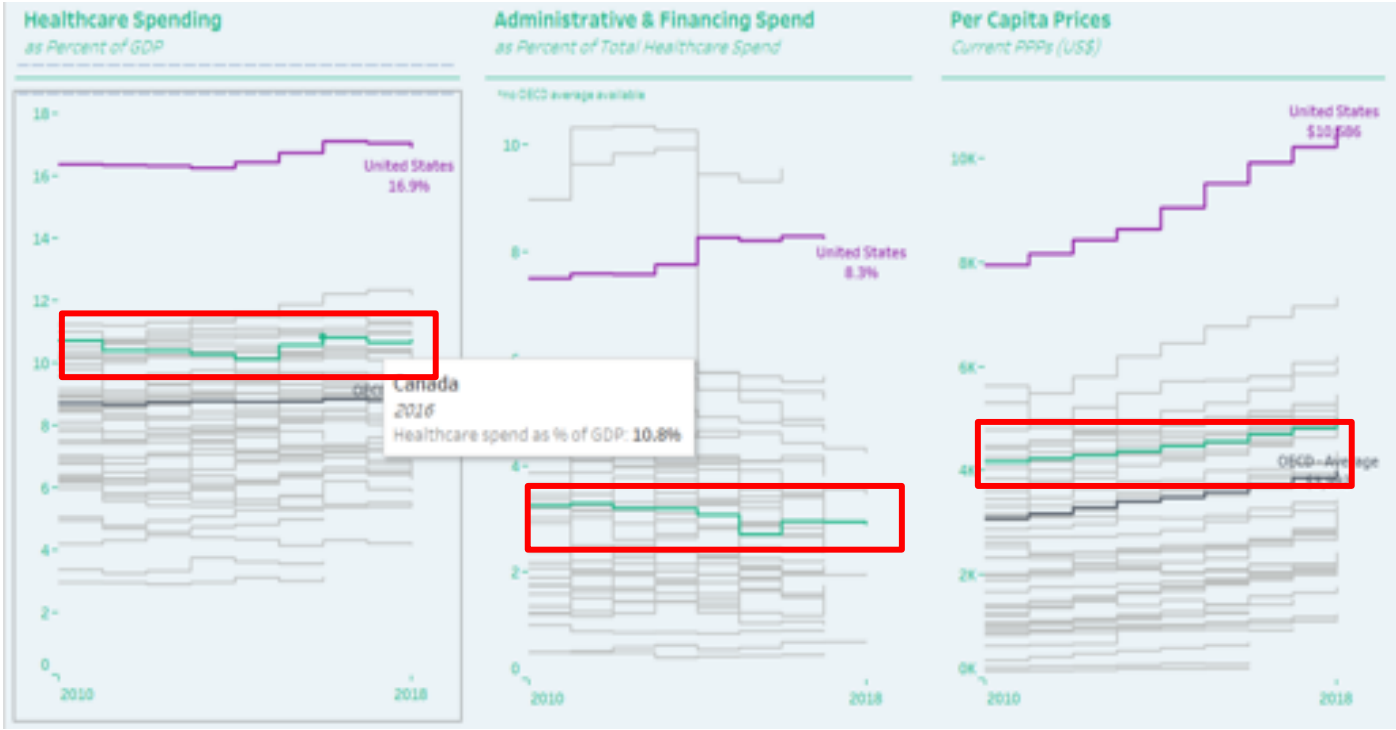
Average

Chosen



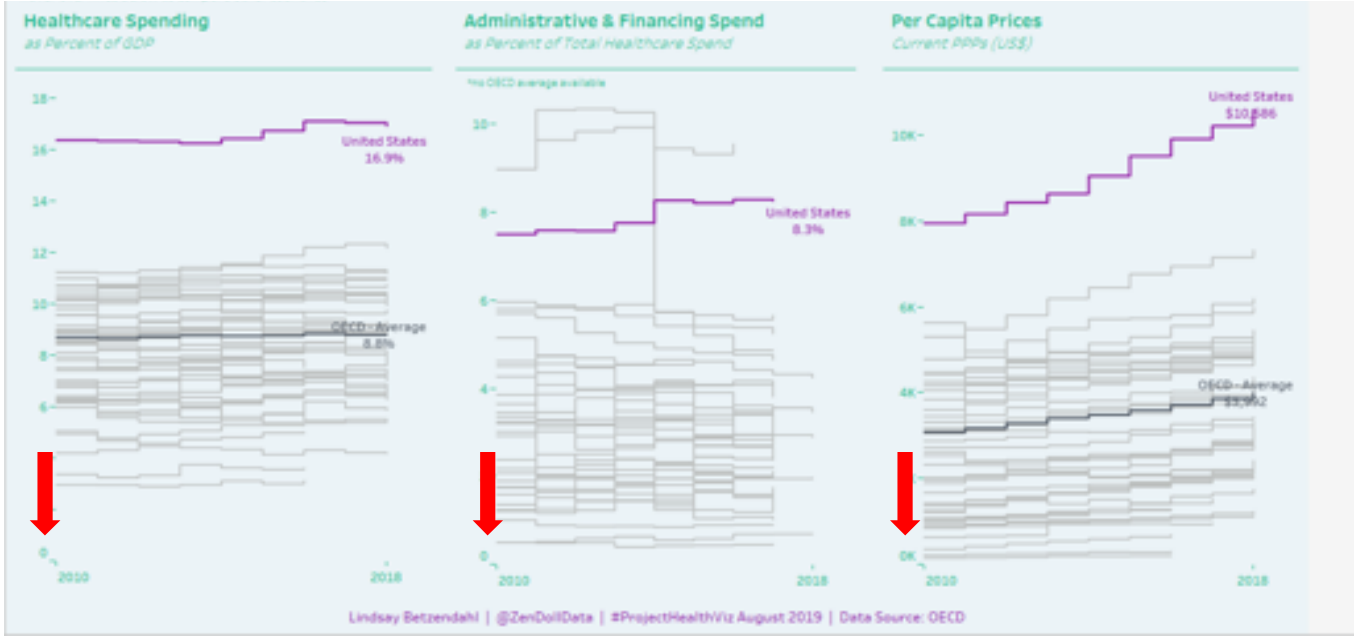
Color(Cont'd)

- Popout effect - compare intuitively



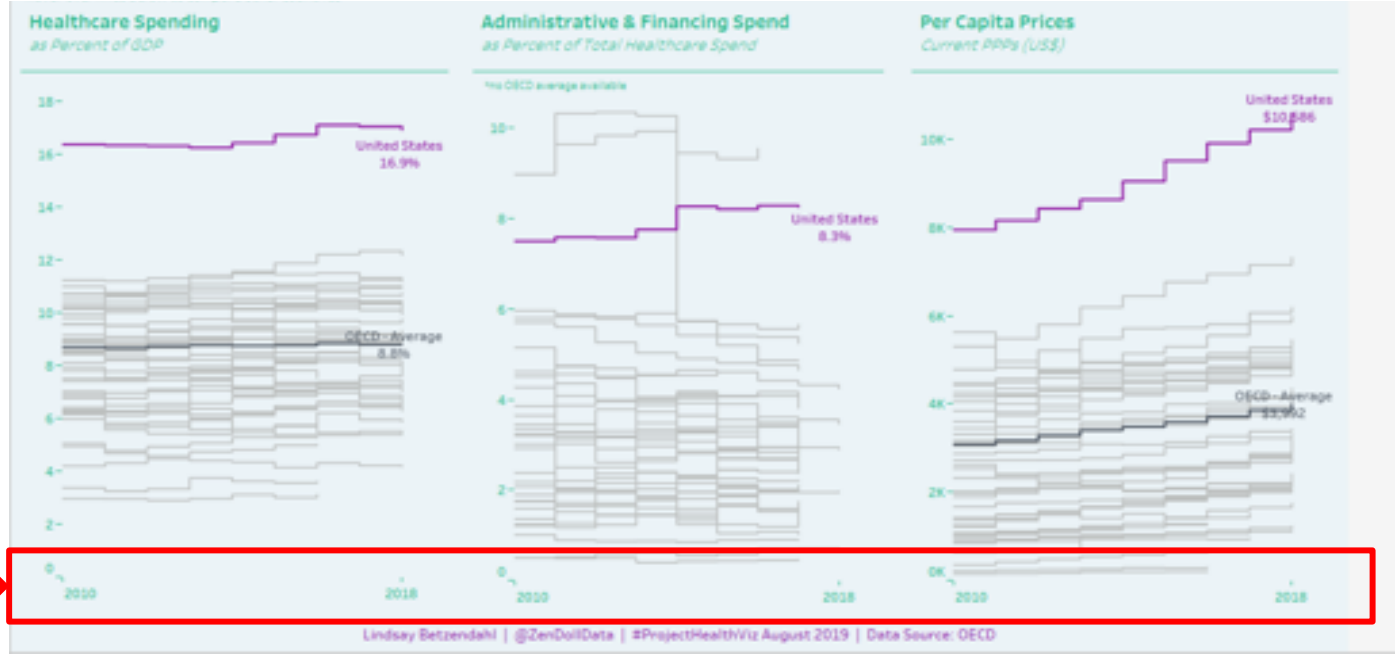
Tufte Design Principle

- ➔ Similar staring point;
- ➔ One dimension to represent one dimentsion.



Time Series Data

- Line graph - observe variance of country annually.



Summarize

✘ Over hue

✔ Dimension reduction

✔ Eyes beat memory

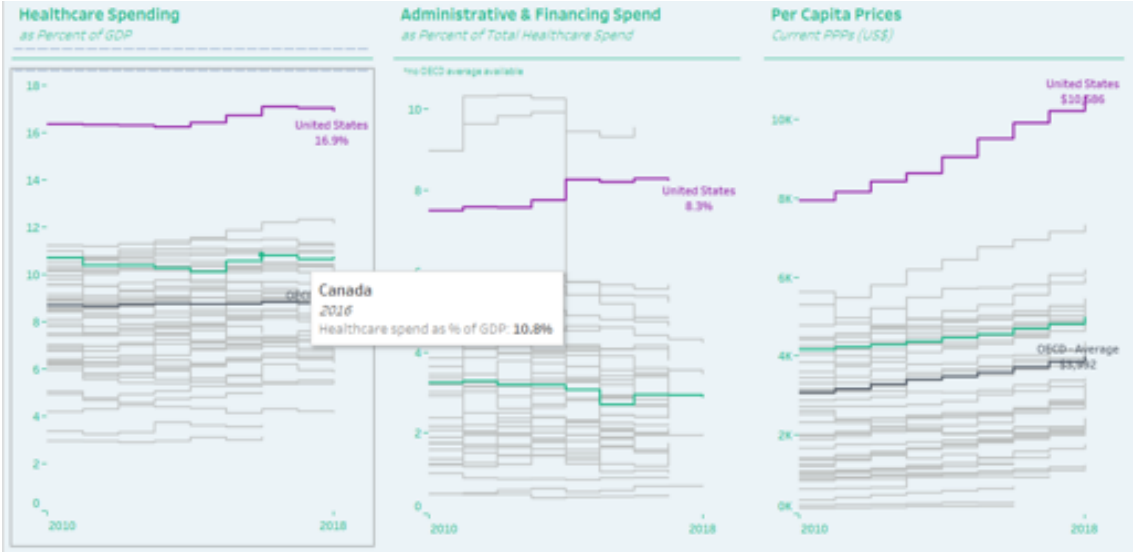
✔ Harmonious color comb

✔ Popout effect

✔ Same starting point

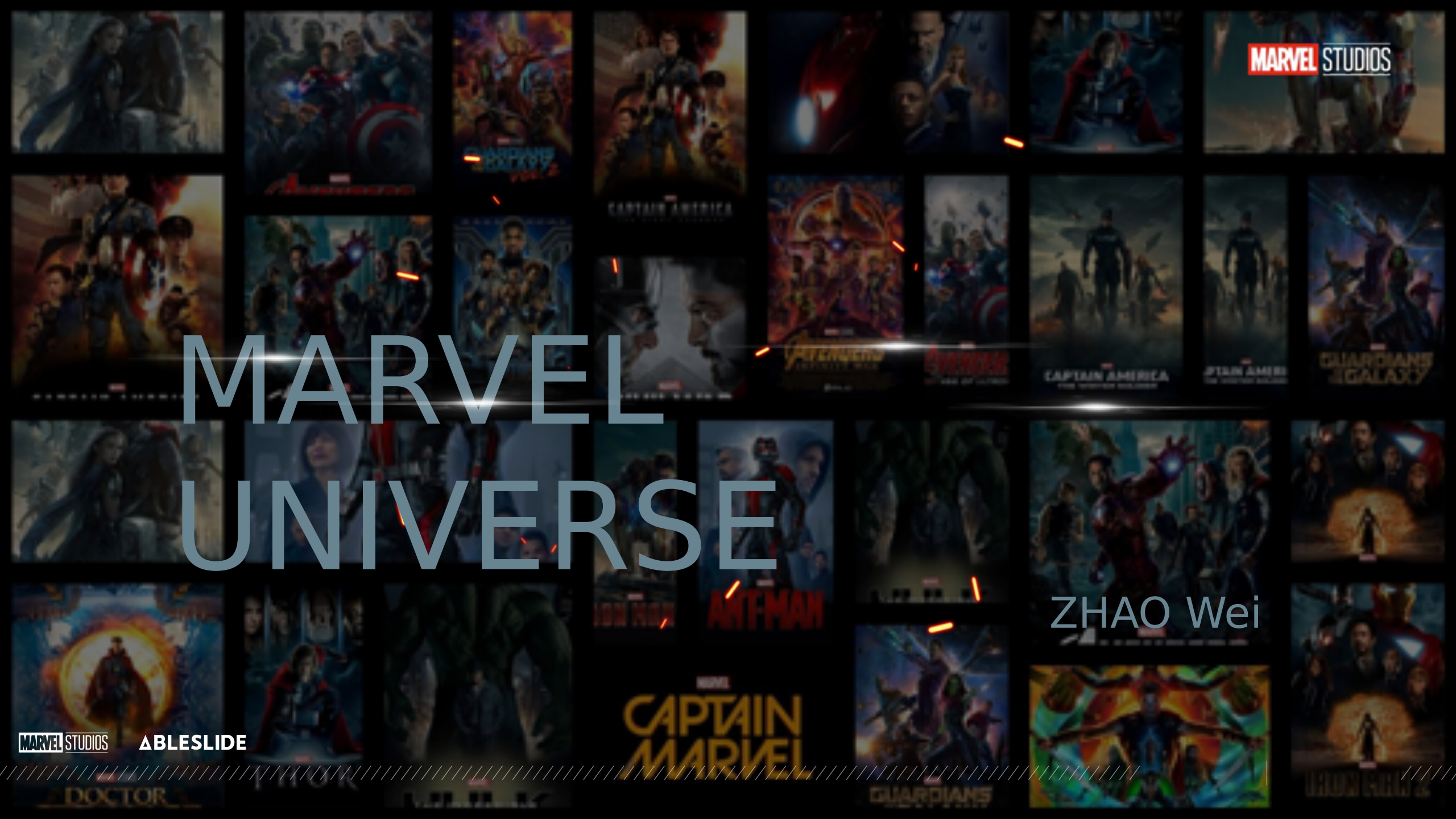
✔ 1D → 1D

✔ Time series data - line graph



Vis #76

https://youtu.be/pYwToGR7p7E

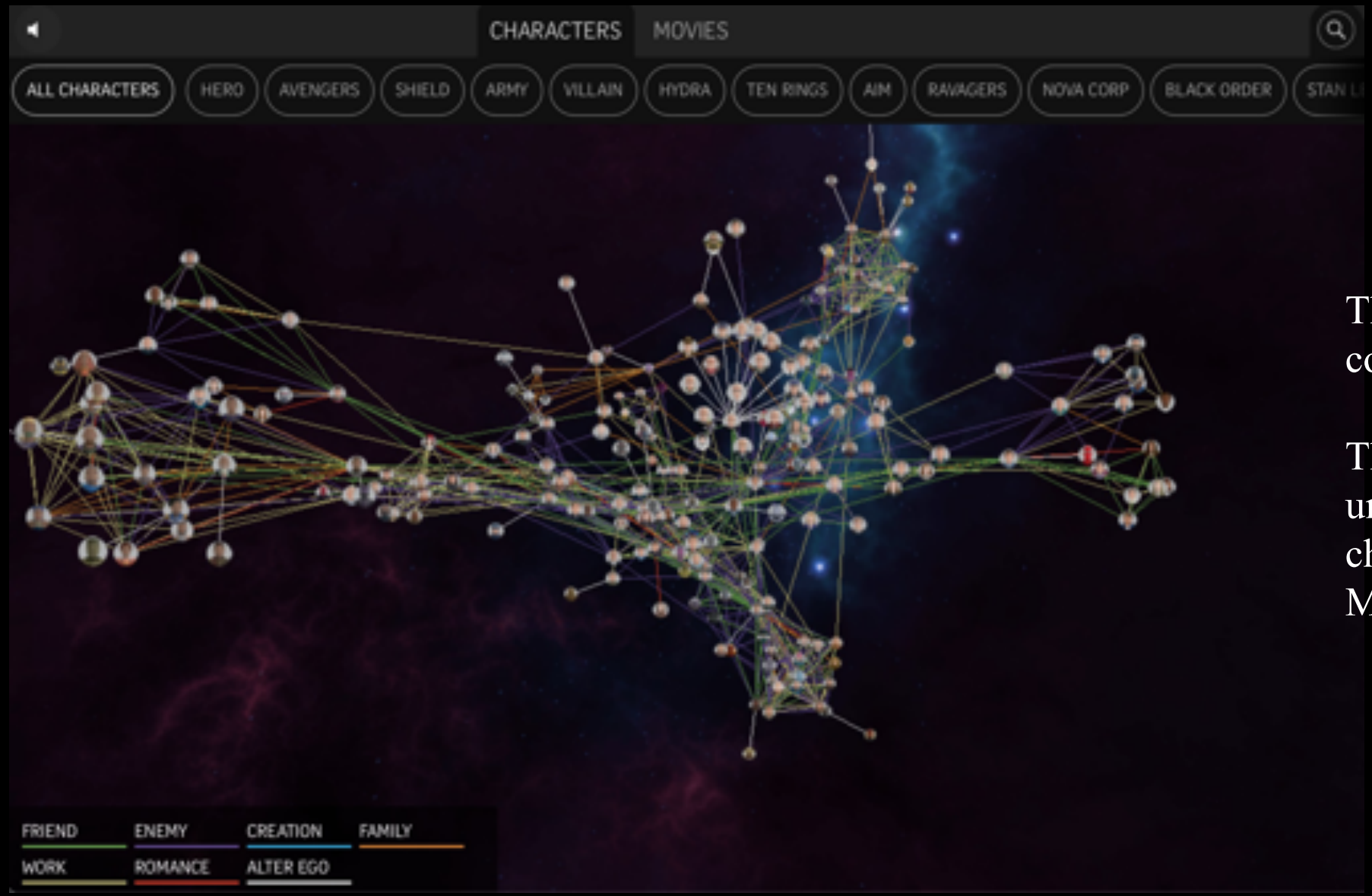


MARVEL UNIVERSE

ZHAO Wei

MARVEL STUDIOS ABLESLIDE

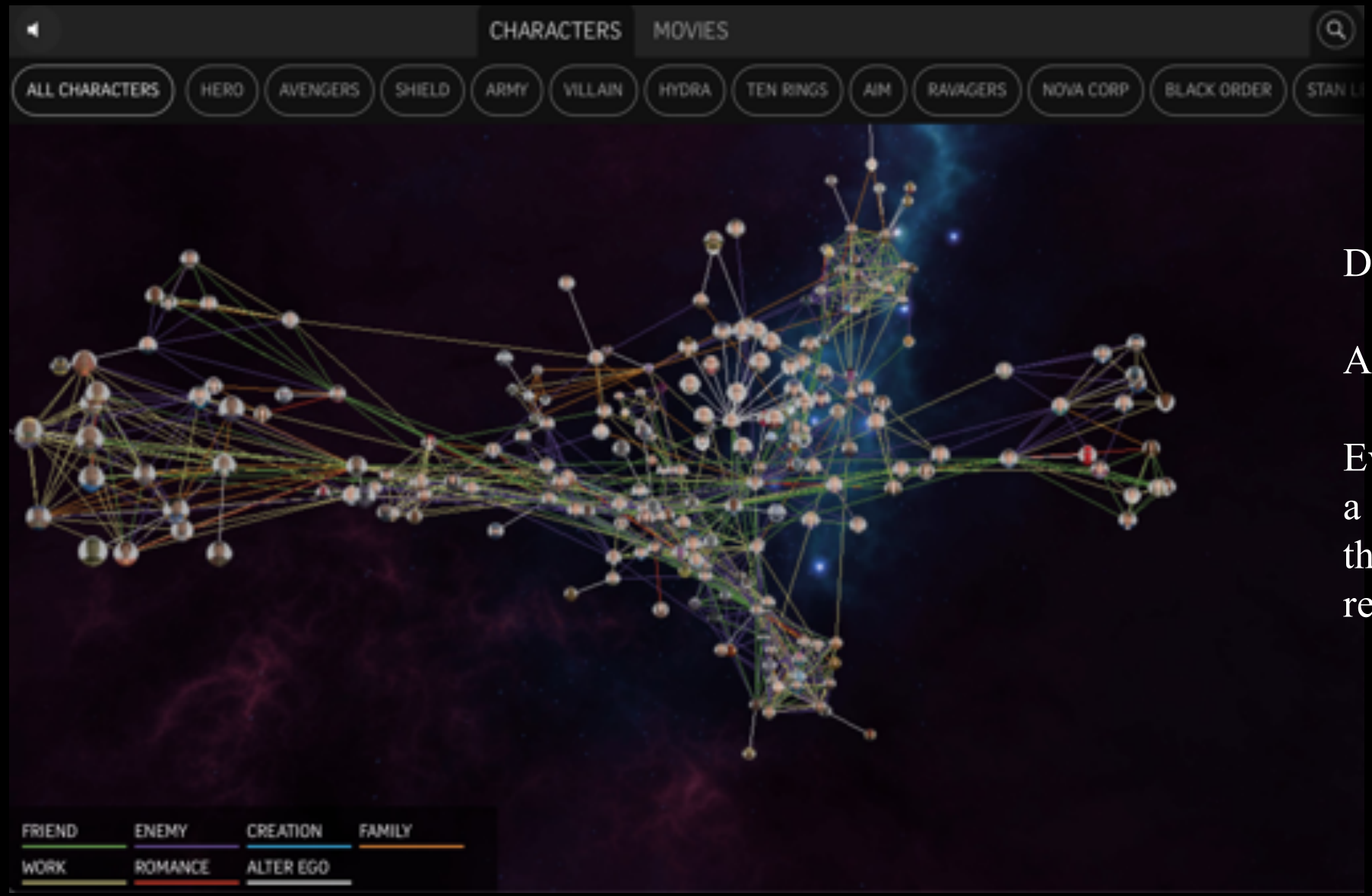
MARVEL UNIVERSE Visualization



The characters and stories are complex in marvel movies.

This visualization is a fun way to understand relationship between characters and movies inside the Marvel Multi-Universe.

Dataset && Attribute

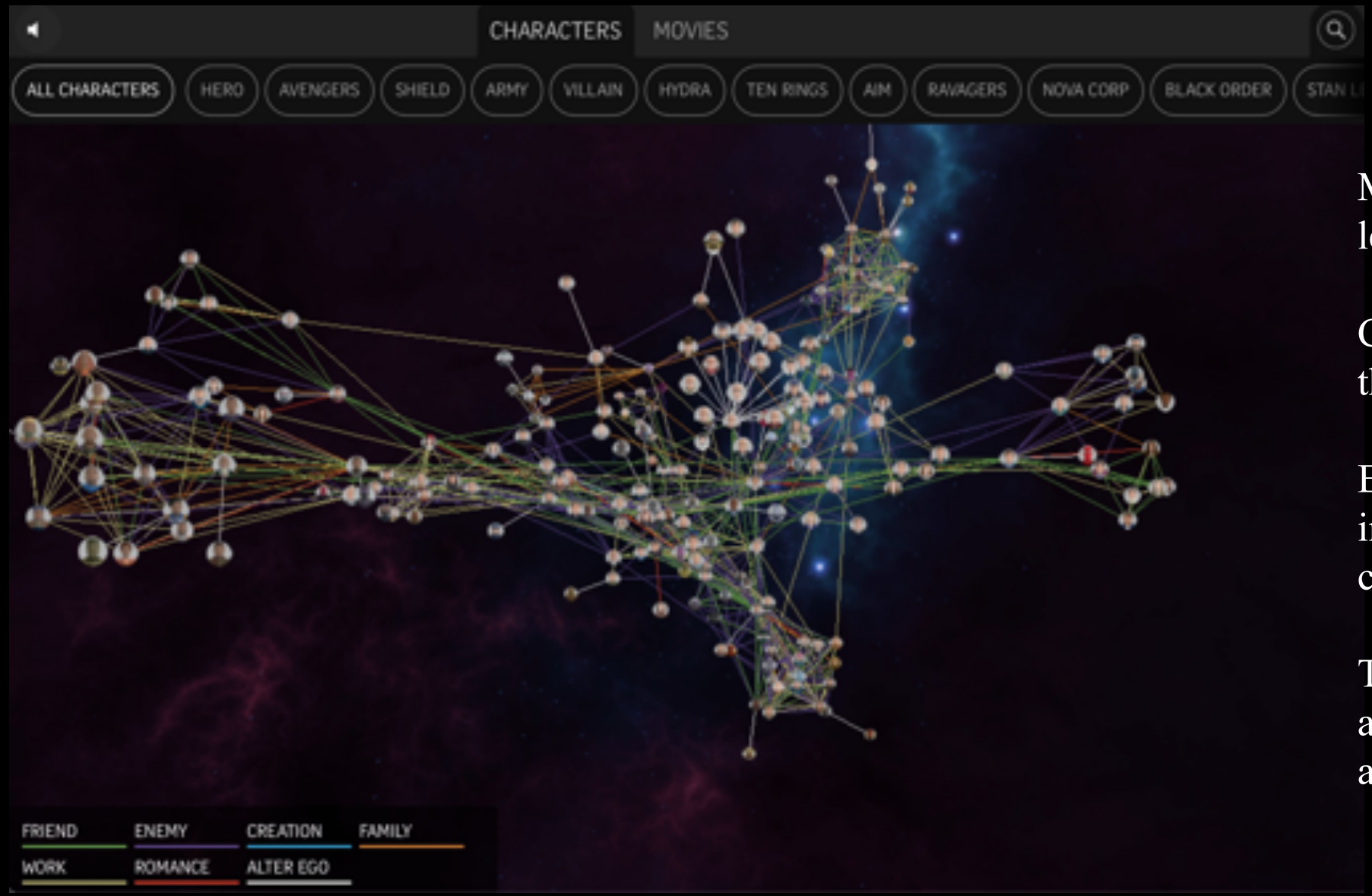


Dataset type: Networks

Attribute types: Circle && line

Every circle in the map represents a character, and the lines between them imply they have some relationship.

Marks && Channels



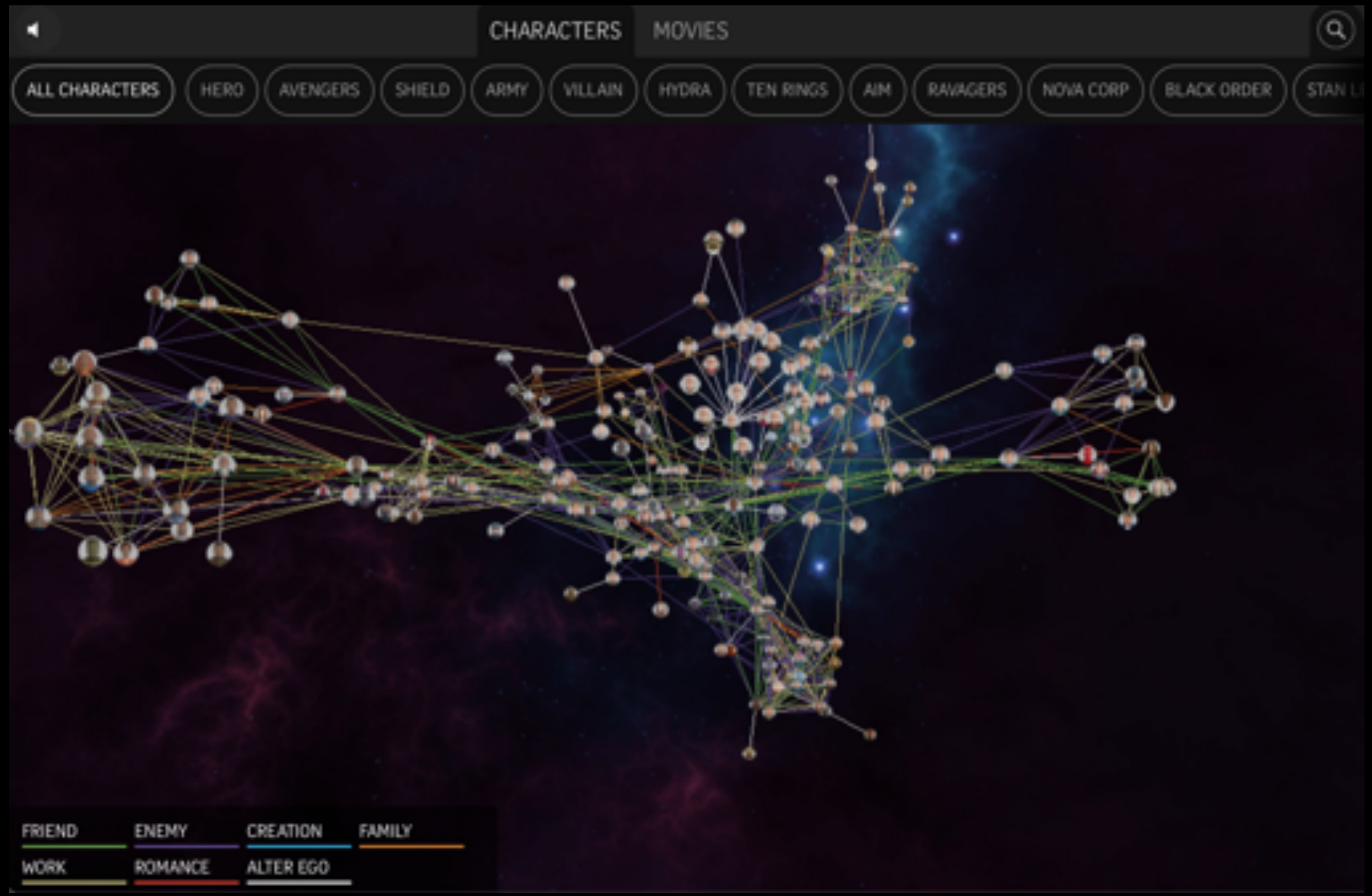
Marks type: the lines of different length

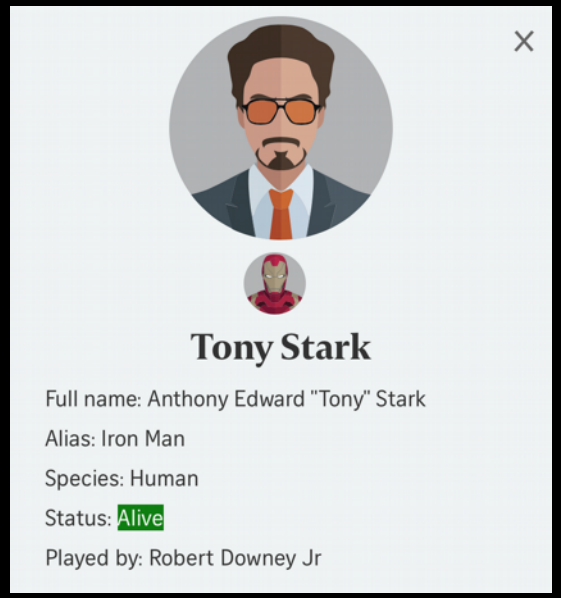
Channels types: the color used in the line; the location of the circle

Eg: Green implies friends, purple implies enemy, blue implies creation.

The longer the lines are, the far away relationship the characters are.

Marks && Channels





Every character has a brief biography, and if you click on it, it will give you some details about the character.

Thanks for your viewing

MARVEL STUDIOS
MARVEL STUDIOS ABLESLIDE

Vis #77

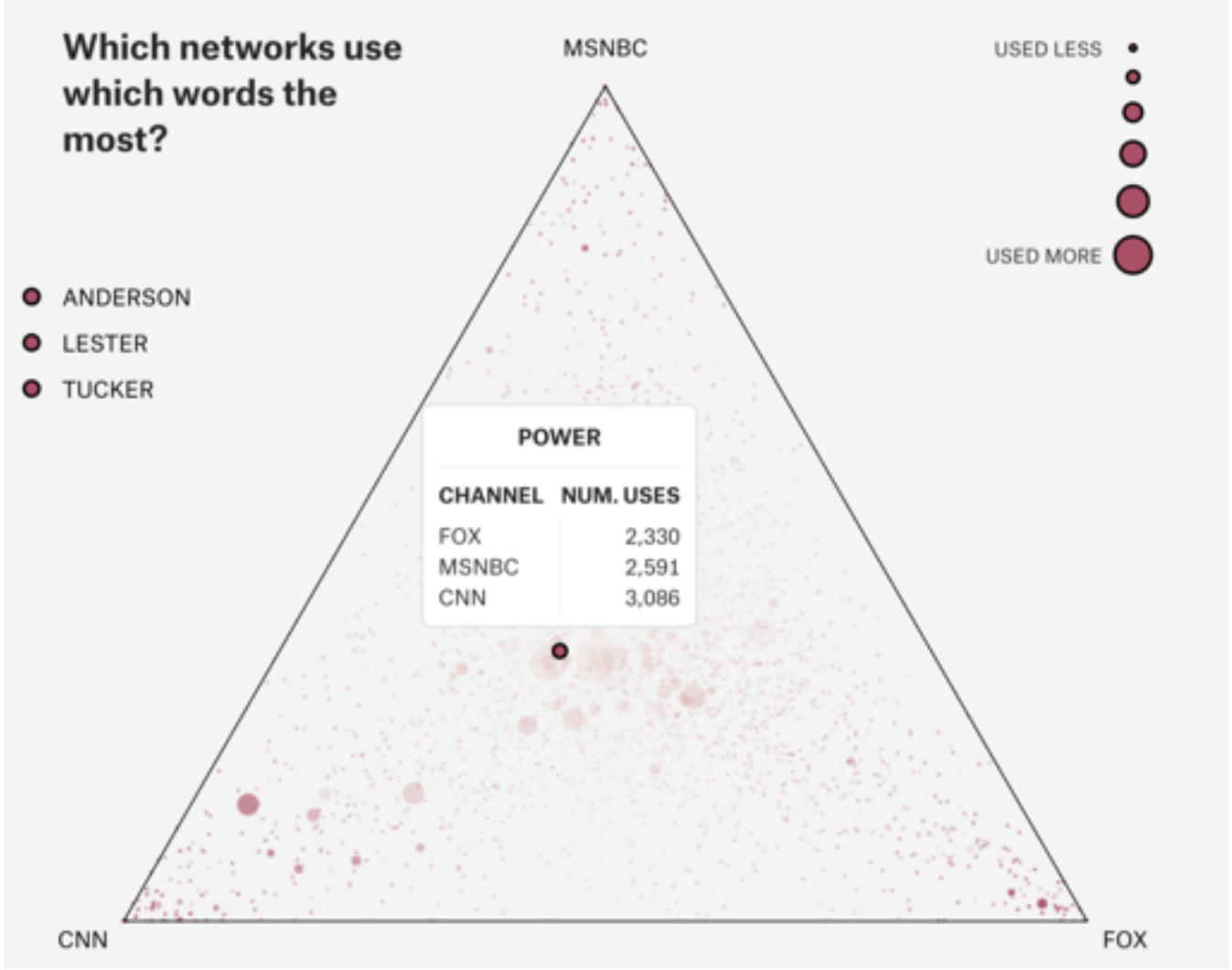
https://youtu.be/zwEmGGItIQc

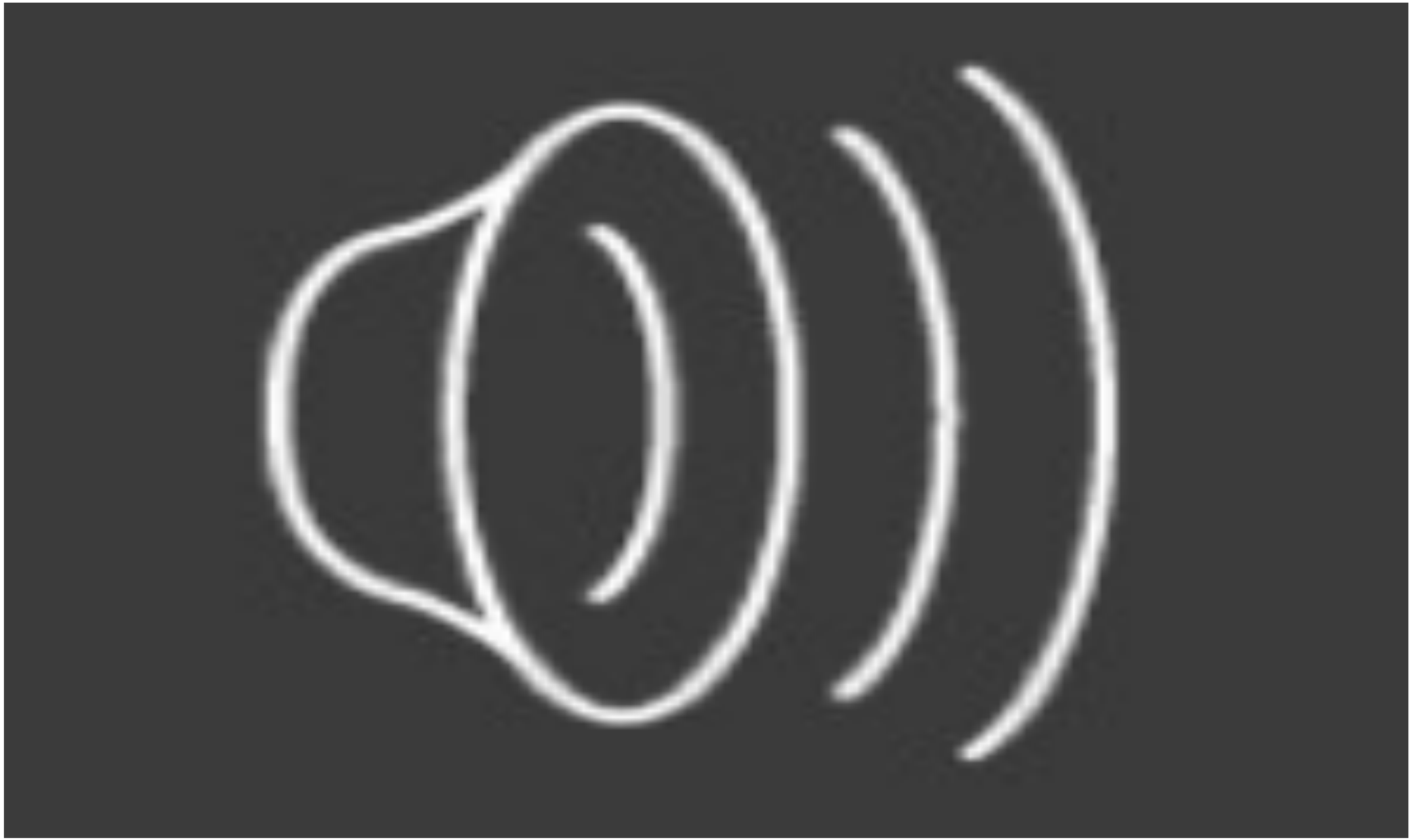
Which Networks Use Which Words Most?

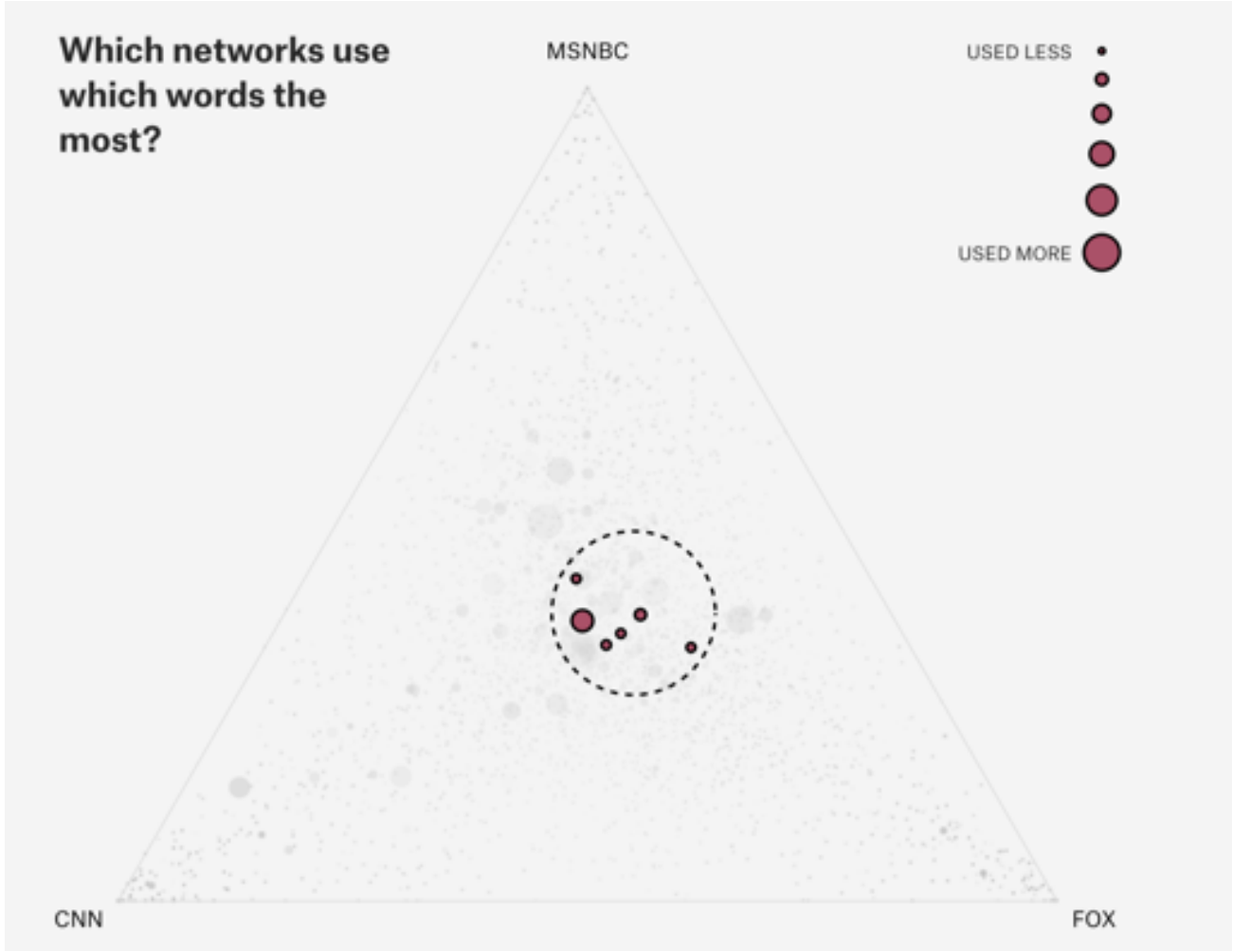
YIGNXIU ZHAO

Channels :

- shape
- size
- position
- color
  Saturation







North Korea

Coverage of North Korea's development of nuclear-capable missiles has been covered about equally by the three networks.

KOREA KIM NUCLEAR ICBM LAUNCH ROCKET

Which networks use which words the most?

Explore

Filter the chart or search for a word like "Trump" or "antifa".

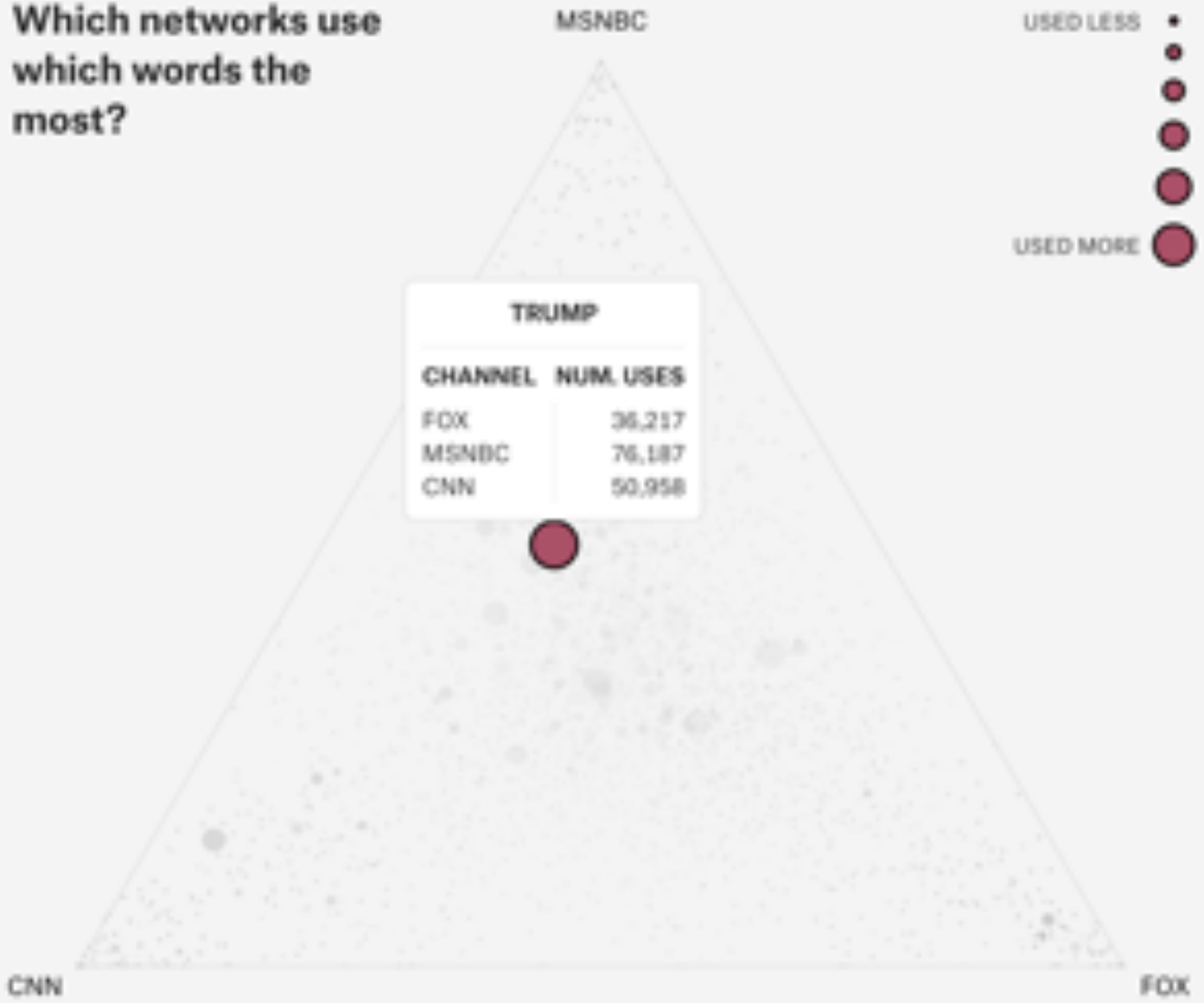
FILTER BY NUM. OCCURRENCES

0 170K

FIND A WORD

trump

TRUMP ×



Explore

Filter the chart or search for a word like "Trump" or "antifa".

FILTER BY NUM. OCCURRENCES

19K 170K

Thank you!

Vis #78

https://www.youtube.com/watch?v=ec-qO93dJ3c

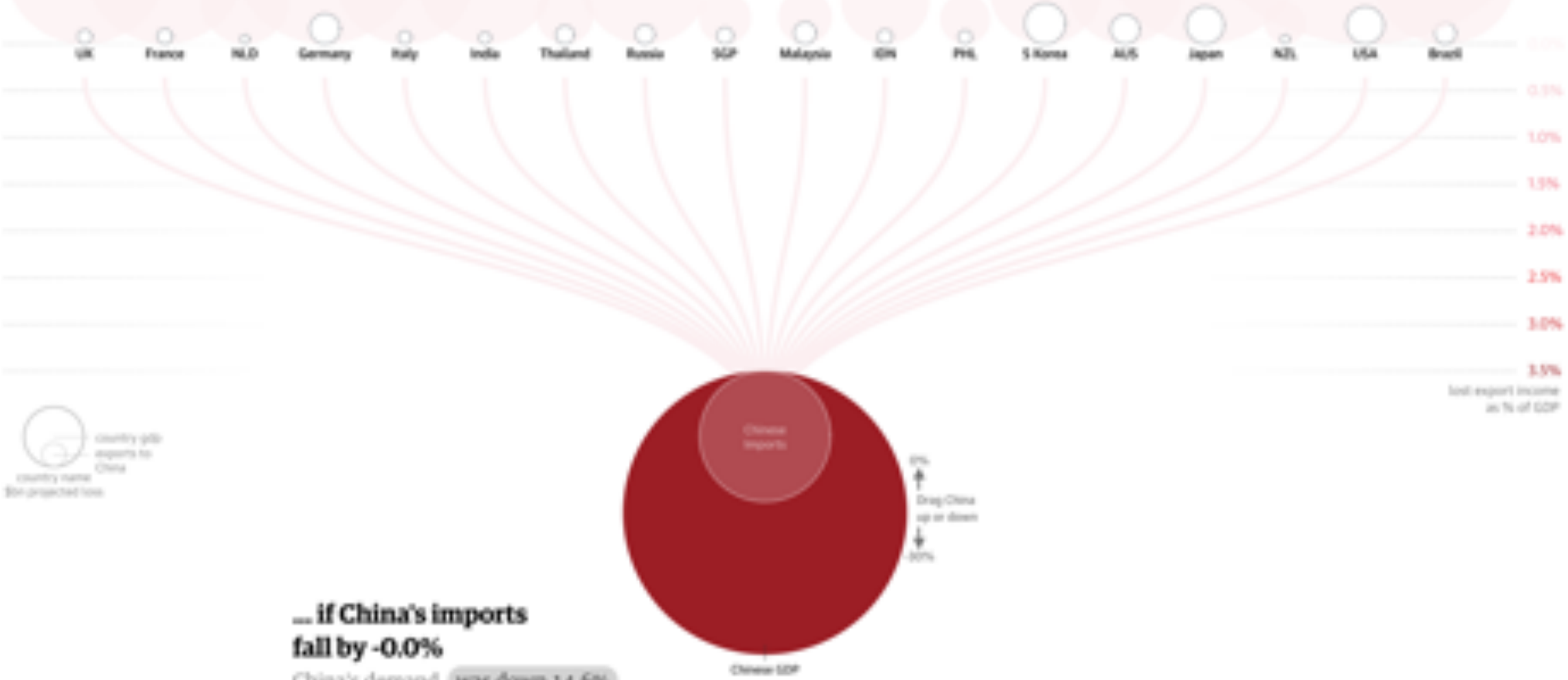
Data Visualization

How China's economic slowdown could weigh on the rest of the world

Zhou Hanwen
20660105

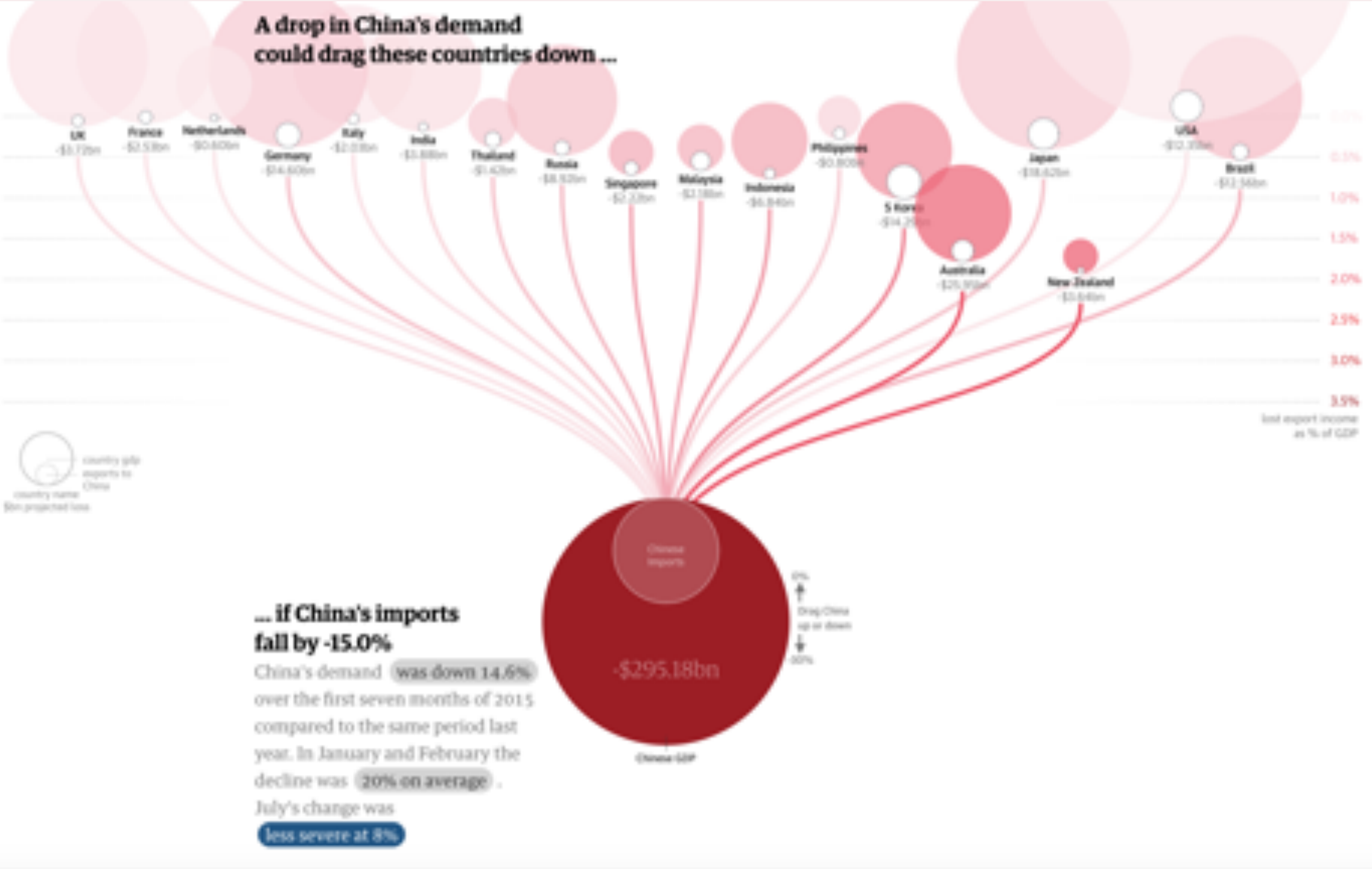
https://www.theguardian.com/world/ng-interactive/2015/aug/26/china-economic-slowdown-world-imports

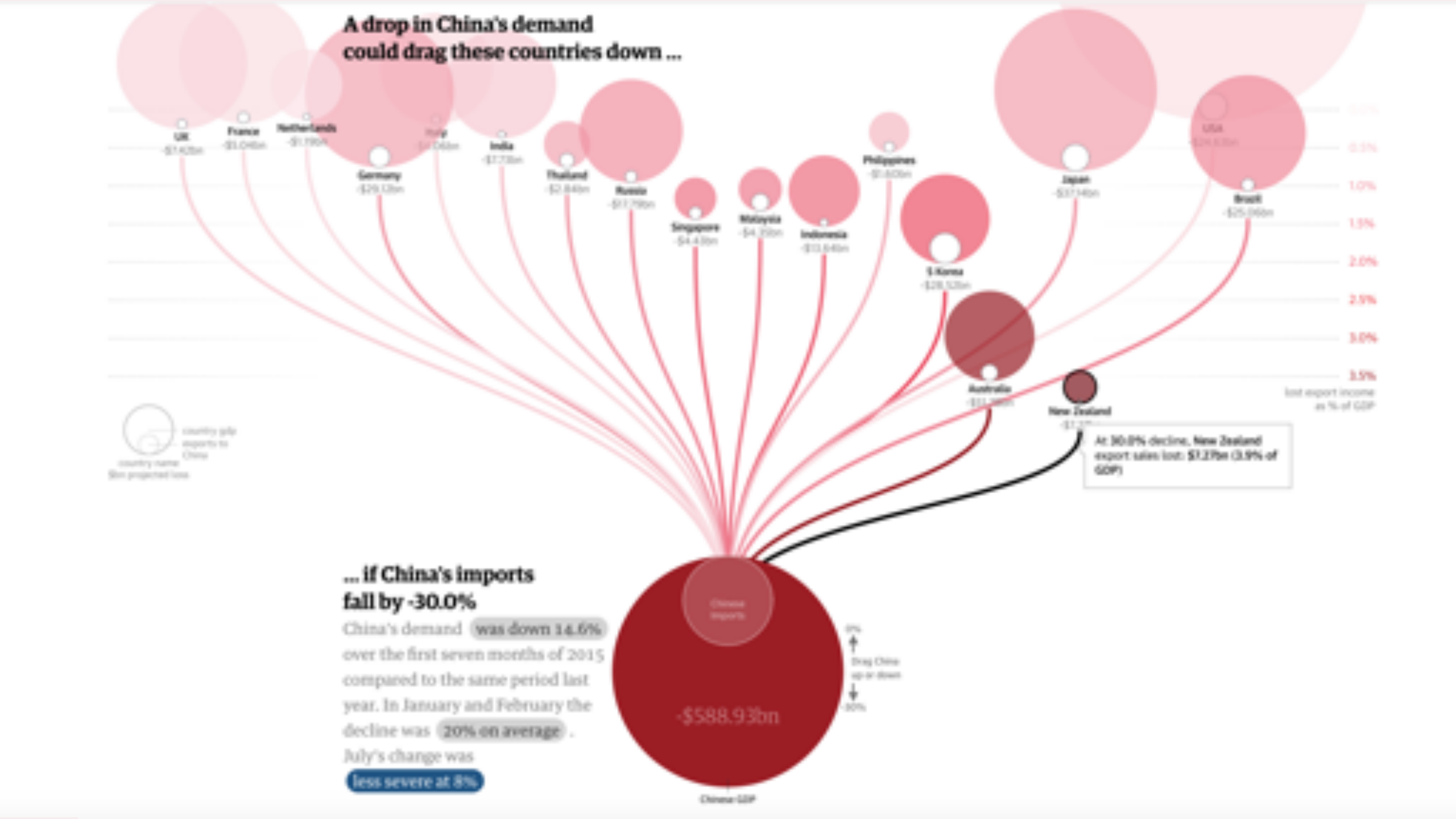
A drop in China's demand could drag these countries down ...



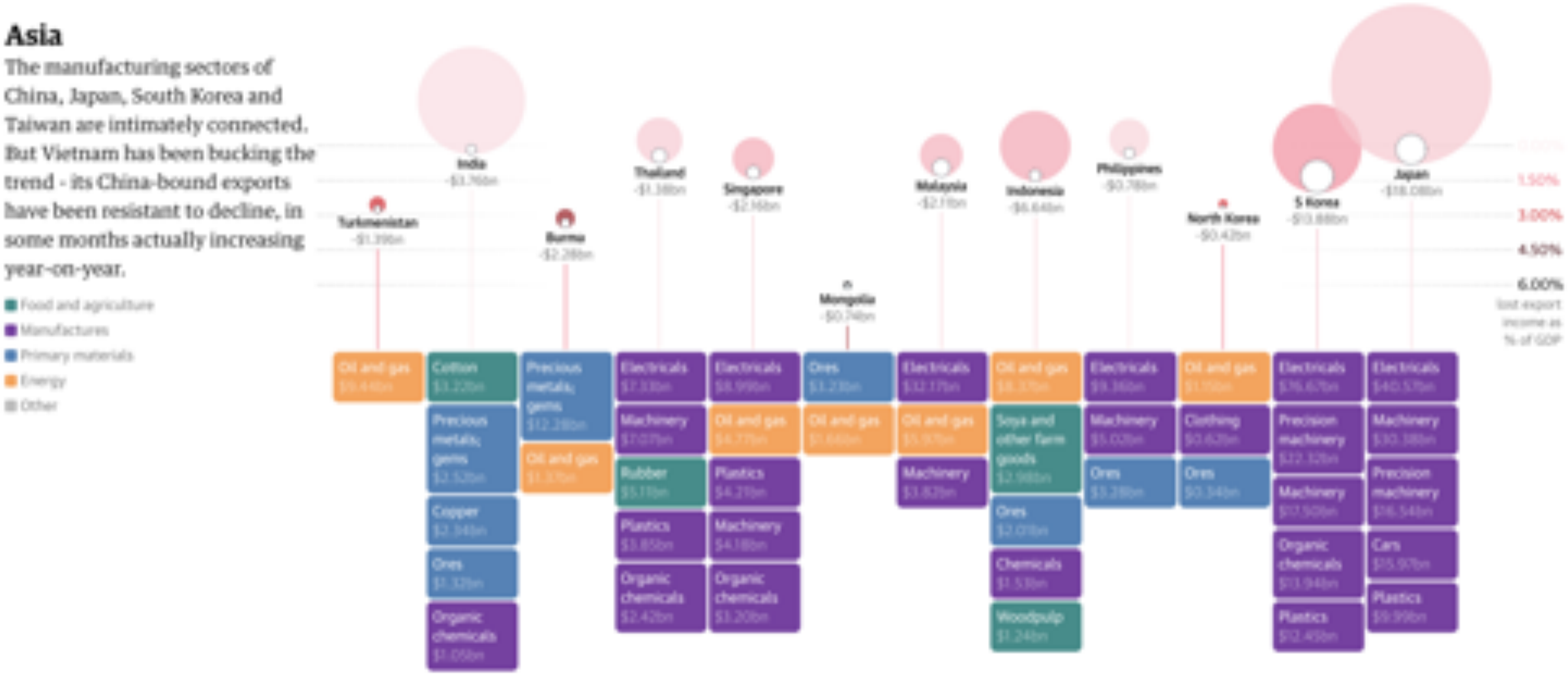
... if China's imports fall by -0.0%

China's demand was down 14.6% over the first seven months of 2015 compared to the same period last year. In January and February the decline was 20% on average . July's change was less severe at 8%

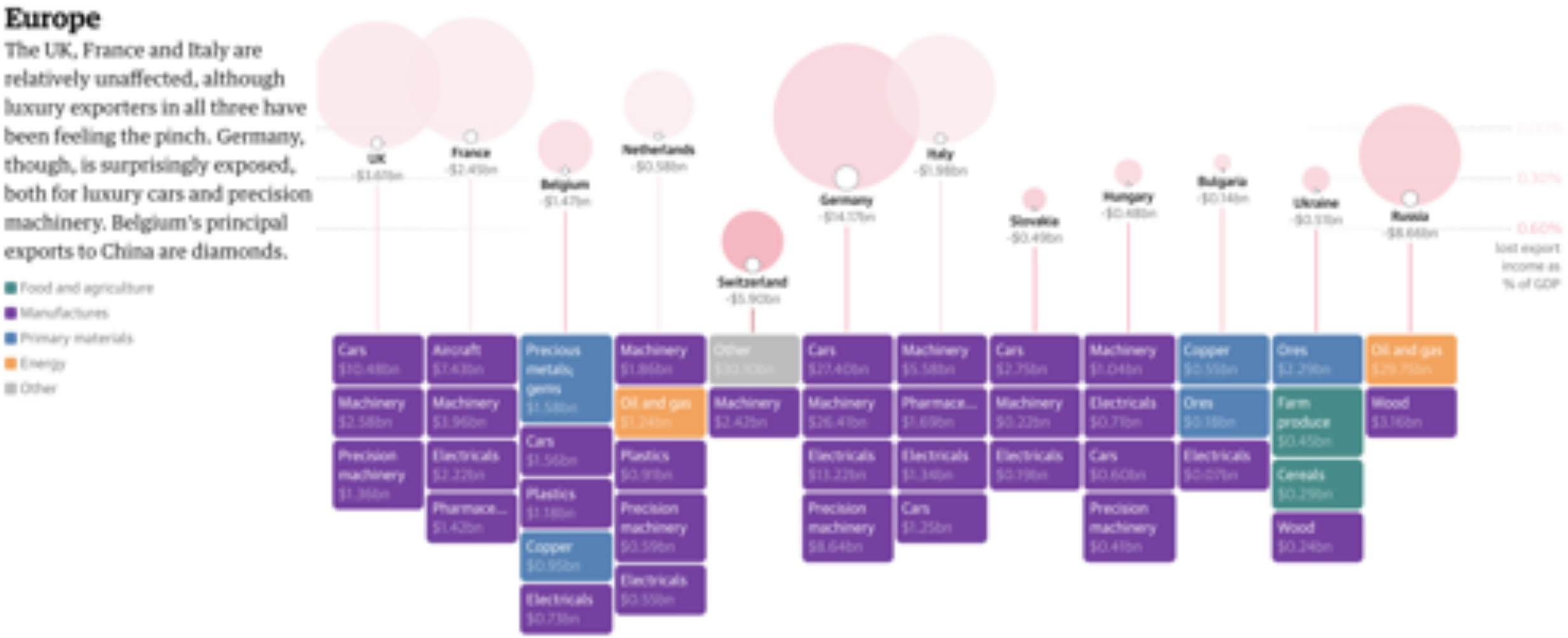

A drop in China's demand could drag these countries down ...
UK
-$0.72bn
France
-$2.53bn
Netherlands
-$0.60bn
Germany
-$4.60bn
Italy
-$2.08bn
India
-$1.68bn
Thailand
-$1.42bn
Russia
-$8.92bn
Singapore
-$2.28bn
Malaysia
-$2.18bn
Indonesia
-$6.84bn
Philippines
-$0.80bn
S Korea
-$4.29bn
Australia
-$20.95bn
Japan
-$18.62bn
New Zealand
-$0.84bn
USA
-$12.35bn
Brazil
-$2.56bn
0.5%
1.0%
1.5%
2.0%
2.5%
3.0%
3.5%
lost export income as % of GDP
country gdp
exports to China
country name
$bn projected loss
Chinese imports
-$295.18bn
Chinese GDP
0%
Drag China up or down
-30%
... if China's imports fall by -15.0%
China's demand was down 14.6% over the first seven months of 2015 compared to the same period last year. In January and February the decline was 20% on average . July's change was less severe at 8%


A drop in China's demand could drag these countries down ...
UK
France
Netherlands
Germany
India
Thailand
Russia
Singapore
Malaysia
Indonesia
Philippines
S.Korea
Japan
USA
Brazil
Australia
New Zealand
0.5%
1.0%
1.5%
2.0%
2.5%
3.0%
3.5%
lost export income as % of GDP
country gdp exports to China
country name
$bn projected loss
At 30.0% decline, New Zealand export sales lost: $7.2bn (3.9% of GDP)
... if China's imports fall by -30.0%
China's demand was down 14.6% over the first seven months of 2015 compared to the same period last year. In January and February the decline was 20% on average. July's change was less severe at 8%
Chinese imports
-$588.93bn
Chinese GDP
0%
Drag China up or down
80%

Effects in different continents



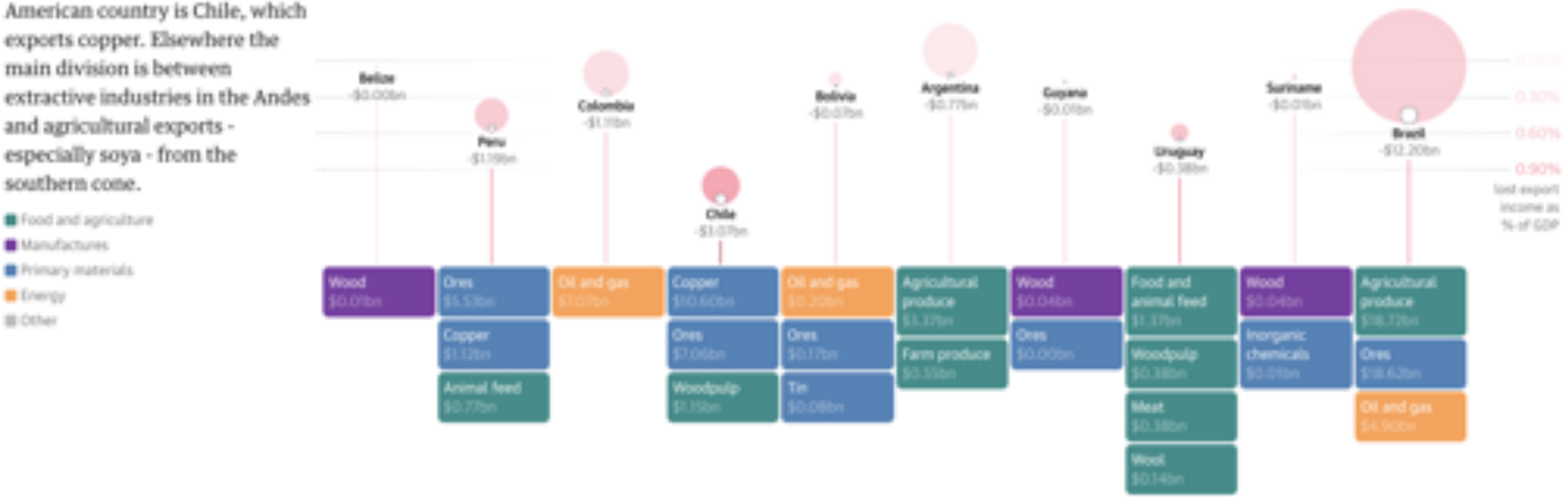
Effects in different continents



Effects in different continents

South America

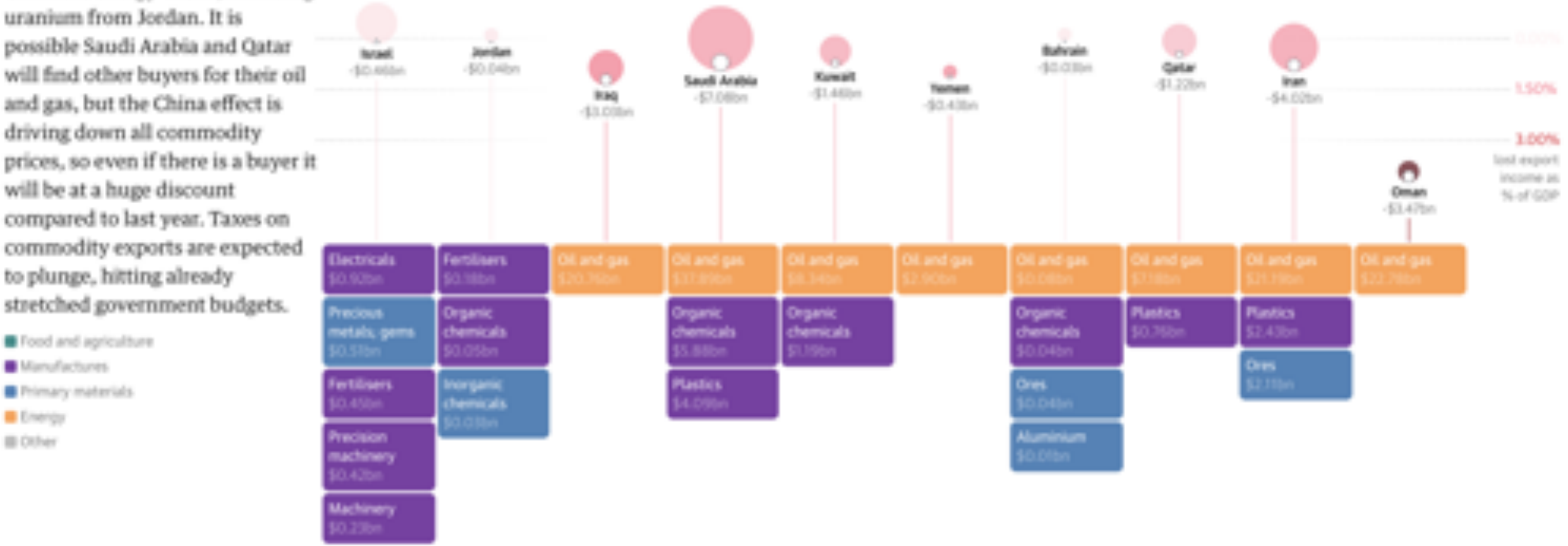
The most exposed South American country is Chile, which exports copper. Elsewhere the main division is between extractive industries in the Andes and agricultural exports - especially soya - from the southern cone.



Effects in different continents

Middle East

Most of the region's exports to China are energy-based, including uranium from Jordan. It is possible Saudi Arabia and Qatar will find other buyers for their oil and gas, but the China effect is driving down all commodity prices, so even if there is a buyer it will be at a huge discount compared to last year. Taxes on commodity exports are expected to plunge, hitting already stretched government budgets.



Thanks for watching!

Vis #79

https://youtu.be/XcHVV3uiszM

Top Vis Competition

ssVisualization of U.S. immigration in 200 yearsss

MSBD5005 : Data Visualization

ZHOU, Wen 20617964

DATA

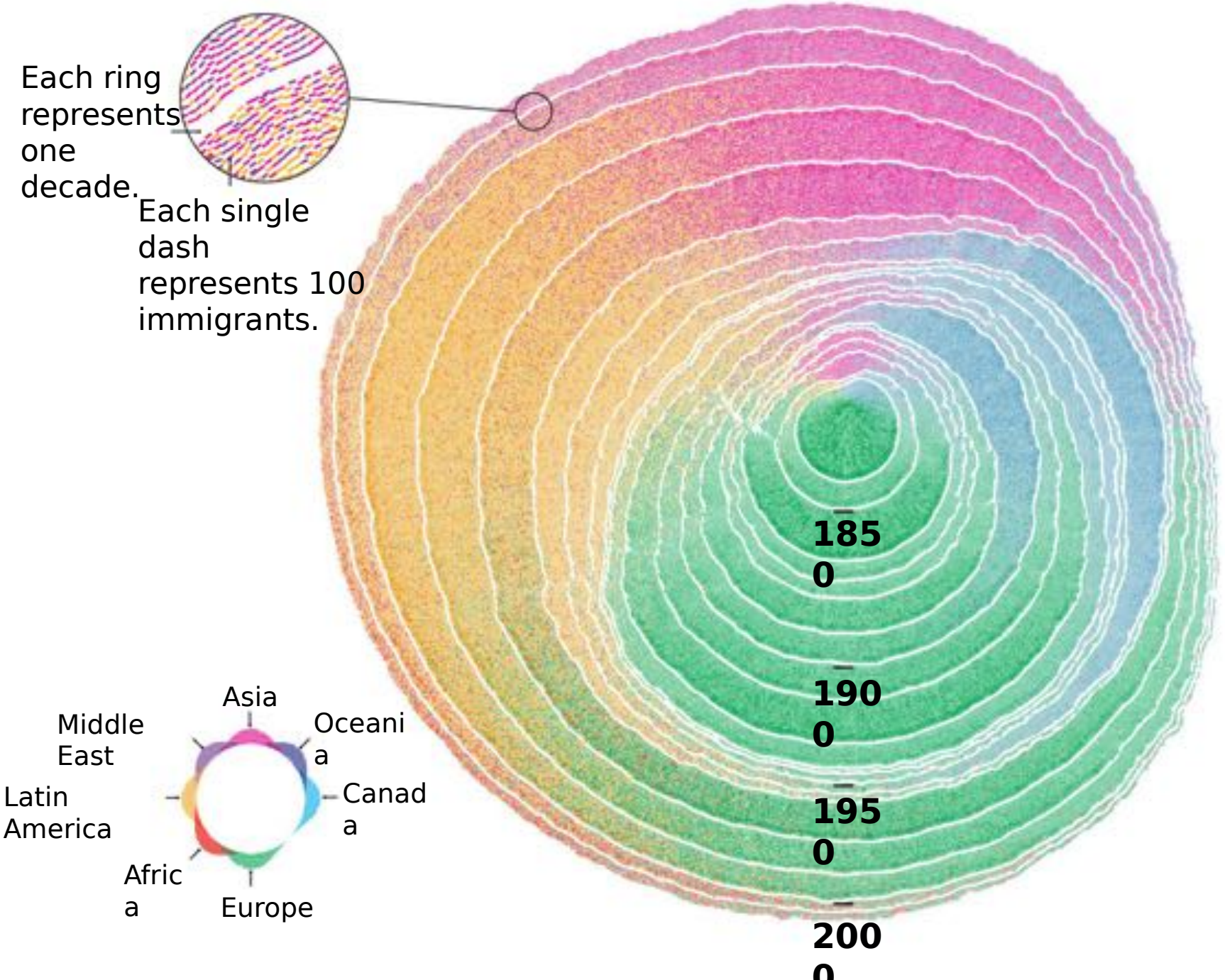
- IPUMS
- Attributes: Time series

TASK

- Simulation of immigration to U.S. from 1830 to 2015 as a set of tree rings

REASON

- Novelty
- Effectiveness



1	anweigang	21	huangsikai	41	lujinjing	61	wuzhiwen
2	baskerronisha	22	huisiulun	42	masong	62	xieweiyan
3	caihaorui	23	huyifei	43	ngaiyatshing	63	xuwenjie
4	caoran	24	jinfenglei	44	ngchiping	64	xuxiaohan
5	chankasing	25	kwongkaming	45	pandasoonamkalyan	65	yangrongfeng
6	chanyikheinavie	26	laialanyuhsien	46	pruekwangkhaokasidit	66	yangyuxia
7	chenchen	27	laiwendi	47	rajputkabir	67	yeguangxian
8	chenmo	28	laukwanyuen	48	rosiercelinevirginie	68	yuanchenge
9	chenpengyao	29	leechiyin	49	seowderekyongway	69	zengcheng
10	chenruifeng	30	leiqinyi	50	shenshaohong	70	zhangdanping
11	cuiyaxin	31	leungwaihan	51	shinyumi	71	zhangguannan
12	dattashinjini	32	lijinjie	52	suran	72	zhangmengyao
13	fanjiahao	33	lingkaileong	53	tanghuimin	73	zhangxueyan
14	ganyuanlin	34	liuran	54	tongkakiucathy	74	zhangying
15	gaoyuanyuan	35	liuxuantong	55	wangchangmin	75	zhaohanrong
16	gardasnuthan	36	liuyunwen	56	wangmeiting	76	zhaowei
17	guyimeng	37	liyigao	57	wangxueying	77	zhaoyingxiu
18	guyu	38	liyuan	58	wangyuxiang	78	zhouhanwen
19	hongseoyoung	39	liyunli	59	wenhuiyang	79	zhouwen
20	huangmei	40	lokokkit	60	wuzhiwei	Shaded means no videos	