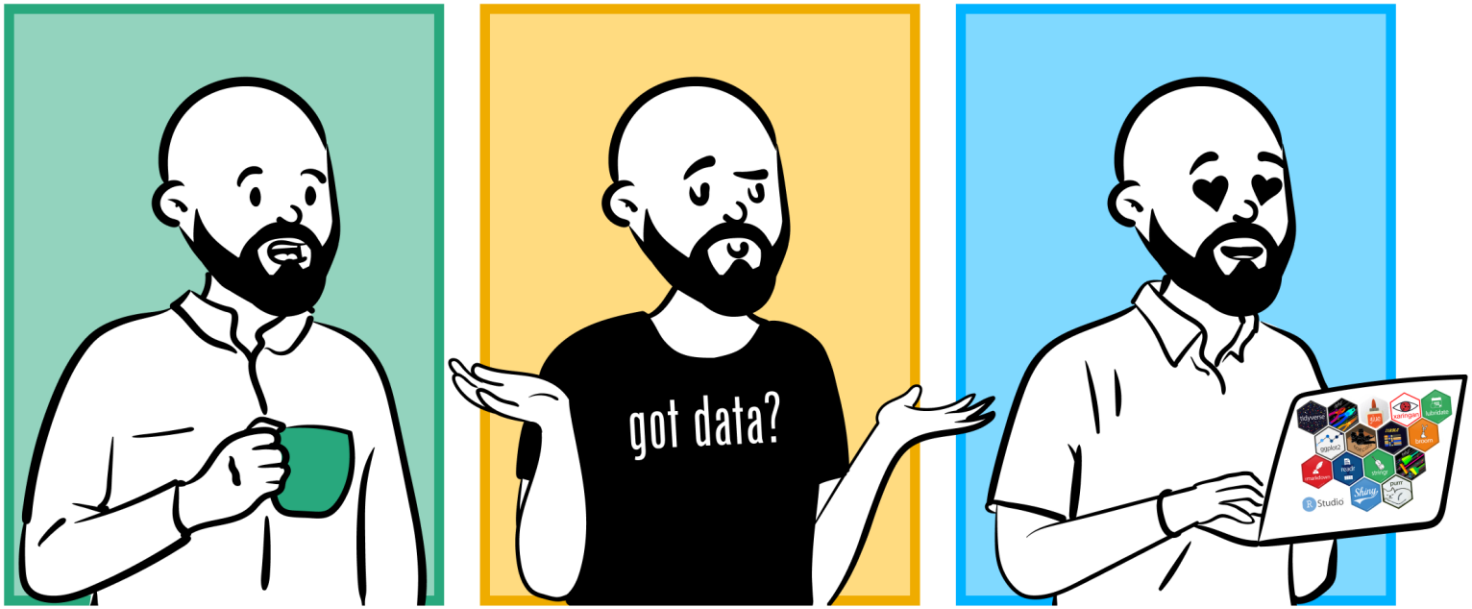
My Favorite ggplot2 Extension Packages

Dr. Cédric Scherer

RLadies Tunis
July 8th 2021

Cédric Scherer

Freelance Data Visualization Specialist
Computational Ecologist at IZW Berlin



cedricscherer.com @CedScherer @z3tt @cedscherer

ggplot2: Visual Data Exploration

Illustration by Allison Horst

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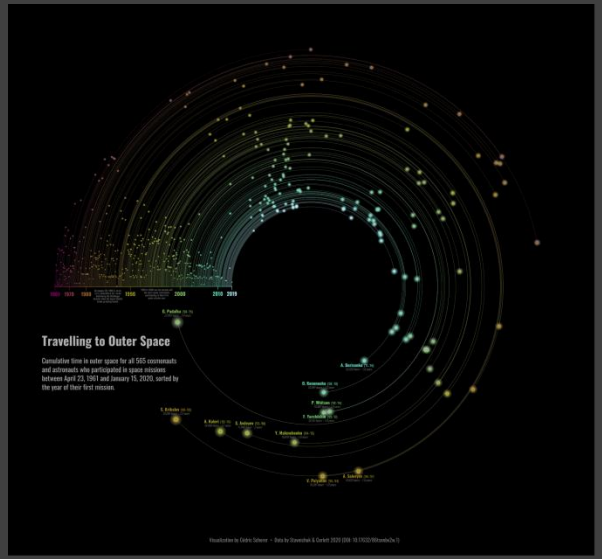
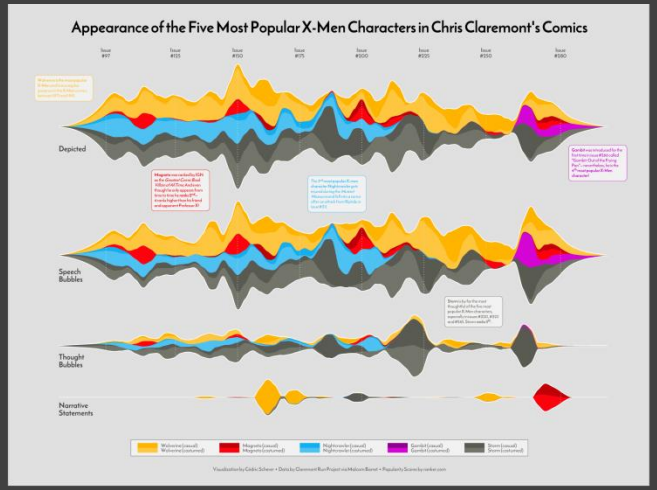
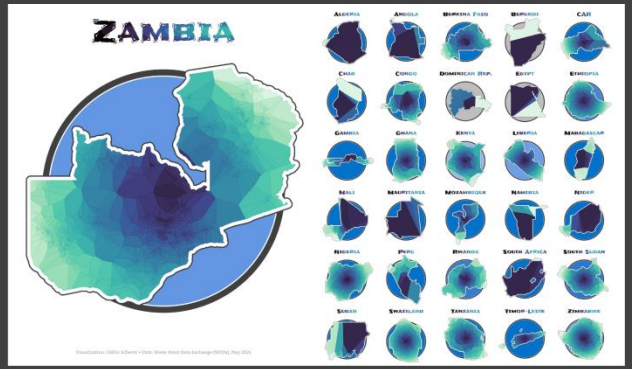
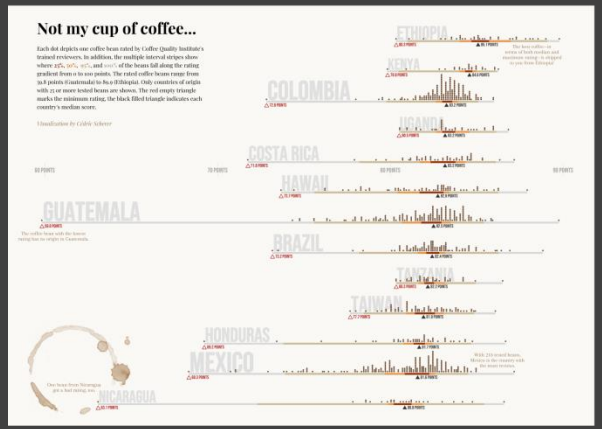
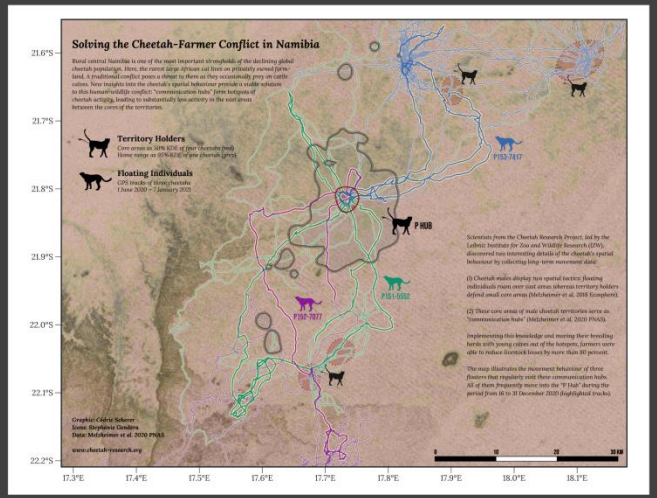
Illustration by Allison Horst

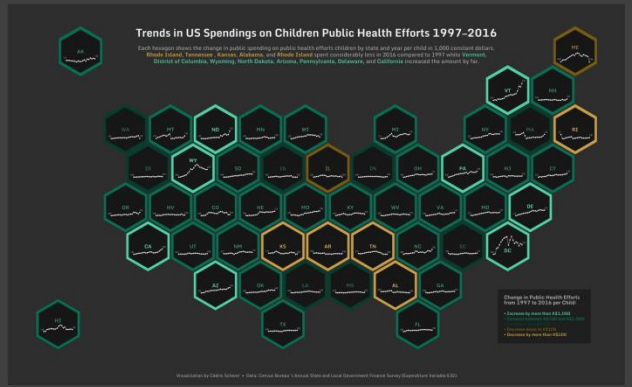

Travelling to Outer Space
Cumulative time in outer space for all 565 cosmonauts and astronauts who participated in space missions between April 23, 1961 and January 15, 2020, sorted by the year of their first mission.

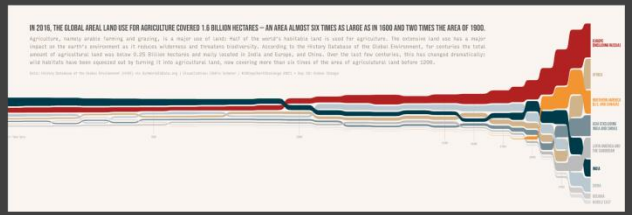

Appearance of the Five Most Popular X-Men Characters in Chris Claremont's Comics
Depicted
Speech Bubbles
Thought Bubbles
Narrative Statements


ZAMBIA


Not my cup of coffee...
Each dot depicts one coffee bean rated by Coffee Quality Institute's trained reviewers. In addition, the multiple interval stripes show where 25%, 50%, 75%, and 100% of the beans fall along the rating gradient from 0 to 100 points. The rated coffee beans range from 39.8 points (Guatemala) to 89.9 (Ethiopia). Only countries of origin with 25 or more tested beans are shown. The red empty triangle marks the minimum rating, the black filled triangle indicates each country's median score.
Visualization by Cédric Scherer
ETHIOPIA
KENYA
COLOMBIA
UGANDA
COSTA RICA
HAWAII
GUATEMALA
BRAZIL
TAIWAN
HONDURAS
MEXICO
NICARAGUA


Solving the Cheetah-Farmer Conflict in Namibia
Territory Holders
Floating Individuals
P HUB
P153-7417
P151-9002
P152-7077
Graphic: Cédric Scherer
Icons: Stephanie Cendero
Data: Mirkelemmer et al. 2020 PNAS
www.cheetah-research.org

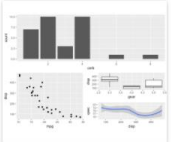

Trends in US Spendings on Children Public Health Efforts 1997–2016
Each hexagon shows the change in public spending on public health efforts children by state and year per child in 1,000 constant dollars.
Rhode Island, Tennessee, Kansas, Alabama, and Rhode Island spent considerably less in 2016 compared to 1997 while Vermont, District of Columbia, Wyoming, North Dakota, Arizona, Pennsylvania, Delaware, and California increased the amount by far.
Change in Public Health Efforts from 1997 to 2016 per Child:
• Increase by more than €$1,000
• Increase above 0 to €$1,000
• Decrease by more than €$1,000


IN 2016, THE GLOBAL AREAL LAND USE FOR AGRICULTURE COVERED 1.6 BILLION HECTARES – AN AREA ALMOST SIX TIMES AS LARGE AS IN 1900 AND TWO TIMES THE AREA OF 1900.

99 registered extensions available to explore

Sort: Github stars | Text Filter: search name, author, descript | Author Filter | Tag Filter | CRAN Only

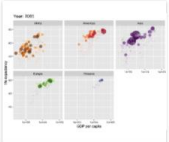
Showing 84 of 99



patchwork

Easy composition of ggplot plots using arithmetic operators

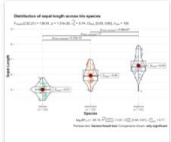
- author: thomasp85
- tags: visualization, composition
- js libraries:



gganimate

A Grammar of Animated Graphics.

- author: thomasp85
- tags: visualization, general
- js libraries:



ggstatsplot

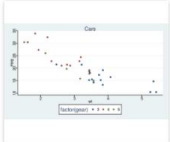
'ggstatsplot' provides a collection of functions to enhance 'ggplot2' plots with results from statistical tests.

- author: IndrajeetPatil
- tags: visualization, statistics
- js libraries:

esquisse

Explore and Visualize Your Data Interactively with ggplot2

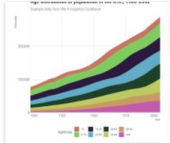
- author: dreamRs
- tags: visualization, interface
- js libraries:



ggthemes

Some extra geoms, scales, and themes for ggplot.

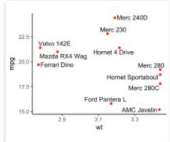
- author: jrnold
- tags: visualization, general, themes
- js libraries:



hrbrthemes

A compilation of extra (ggplot2) themes, scales and utilities, including a spell check function for plot label fields and an overall emphasis on typography.

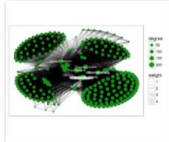
- author: hrbrmstr
- tags: theme, typography
- js libraries:



ggrepel

Repel overlapping text labels away from each other.

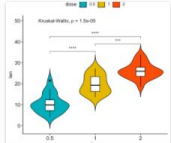
- author: slowkow
- tags: visualization, general
- js libraries:



ggraph

ggraph is tailored at plotting graph-like data structures (graphs, networks, trees, hierarchies...)

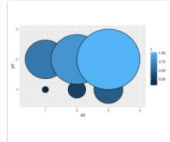
- author: thomasp85
- tags: visualization, general
- js libraries:



ggpubr

'ggplot2' Based Publication Ready Plots

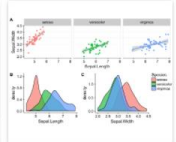
- author: kassambara
- tags: visualization, statistics
- js libraries:



ggforce

ggforce is aimed at providing missing functionality to ggplot2 through the extension system introduced with ggplot2 v2.0.0.

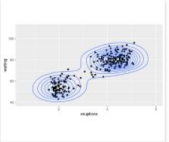
- author: thomasp85
- tags: visualization, general
- js libraries:



cowplot

Streamlined plot theme and plot annotations for 'ggplot2'

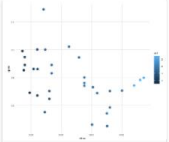
- author: clauswilke
- tags: visualization, general, themes
- js libraries:



ggalt

A compendium of 'geoms', 'coords' and 'stats' for 'ggplot2'

- author: hrbrmstr
- tags: visualization, general
- js libraries:



ggiraph

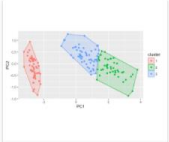
htmlwidget to make 'ggplot' graphics interactive.

- author: davidgohel
- tags: visualization, general
- js libraries:

ggtext

Improved text rendering support for ggplot2

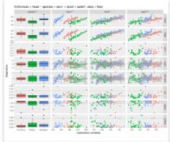
- author: Claus Wilke
- tags: general, theme, typography
- js libraries:



ggfortify

The unified interface to ggplot2 many popular statistical pekackage results.

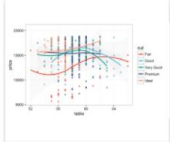
- author: terrytangyuan
- tags: visualization, general
- js libraries:



GGally

ggally extends 'ggplot2' by adding several functions to reduce the complexity of combining geometric objects with transformed data.

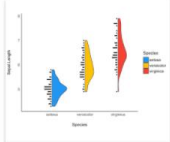
- author: ggobi
- tags: visualization, general
- js libraries:



ggsci

A collection of 'ggplot2' color palettes inspired by scientific journals and science fiction TV shows.

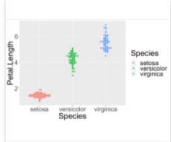
- author: road2stat
- tags: visualization, general
- js libraries:



see

Visualisation Toolbox for 'easystats' and Extra Geoms, Themes and Color Palettes for 'ggplot2'

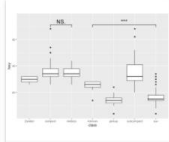
- author: easystats
- tags: visualizations, statistics
- js libraries:



ggbeeswarm

Create beeswarm plots, which avoids overlapping datapoints.

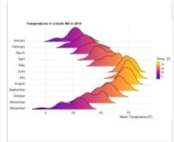
- author: Erik Clarke and Scott Sherrill-Mix
- tags: visualization, beeswarm, categorical
- js libraries:



ggsignif

Significance Brackets for 'ggplot2'.

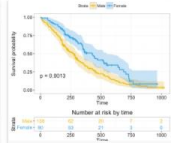
- author: const-ae and IndrajeetPatil
- tags: visualization, multiple comparisons
- js libraries:



ggridges

Ridgeline plot geoms for 'ggplot2'

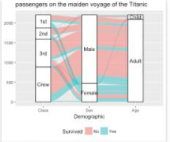
- author: clauswilke
- tags: visualization, general
- js libraries:



survminer

Drawing Survival Curves using 'ggplot2'

- author: kassambara
- tags: visualization, survival
- js libraries:



ggalluvial

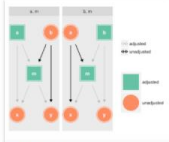
A 'ggplot2' extension for alluvial diagrams.

- author: corybrunson
- tags: visualization, categorical, time series
- js libraries:

ggbump

Bump Chart and Sigmoid Curves.

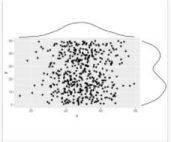
- author: davidsjoberg
- tags: visualization, general, geoms
- js libraries:



ggdag

Causal directed acyclic graphs (DAGs) in ggplot2

- author: malcolmbarrett
- tags: visualization, dags, inference
- js libraries:



ggExtra

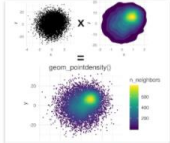
ggExtra lets you add marginal density plots or histograms to ggplot2 scatterplots.

- author: daattali
- tags: histogram, marginal, density
- js libraries:

ggpage

Creates Page Layout Visualizations.

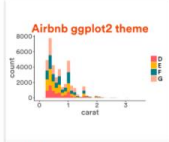
- author: emilhvitfeldt
- tags: visualization, text
- js libraries:



ggpointdensity

Introduces `geom_pointdensity()`: A cross between a scatter plot and a 2D density plot.

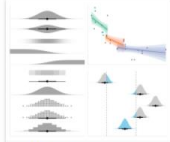
- author: LKremer
- tags: visualization, general
- js libraries:



ggtech

ggplot2 tech themes, scales, and geoms.

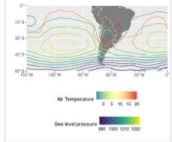
- author: ricardo-bion
- tags: visualization, general, themes
- js libraries:



ggdist

'ggdist' provides stats and geoms for visualizing distributions and uncertainty.

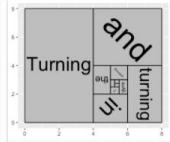
- author: mjskay
- tags: visualization, uncertainty, confidence, probability
- js libraries:



ggnewscale

Use multiple fill and colour scales in 'ggplot2'.

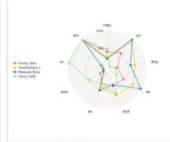
- author: eliocamp
- tags: visualization, general, scales
- js libraries:



ggfittext

ggplot2 geoms to fit text in a box

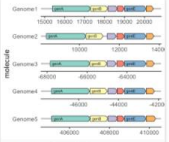
- author: wilkox
- tags: visualization, general, text
- js libraries:



ggradar

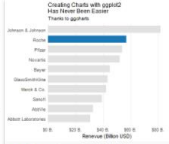
ggradar allows you to build radar charts with ggplot2.

- author: ricardo-bion
- tags: visualization, general
- js libraries:

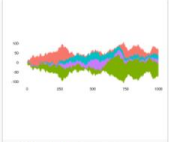


gggenes

ggedit

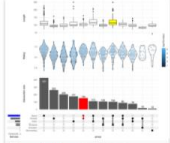


ggcharts

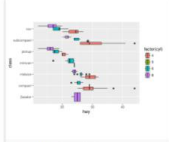


ggTimeSeries

ggeasy



ComplexUpset



ggstance

ggh4x

treemapify

gghalves

calendR

exts.ggplot2.tidyverse.org/gallery

Chart Types

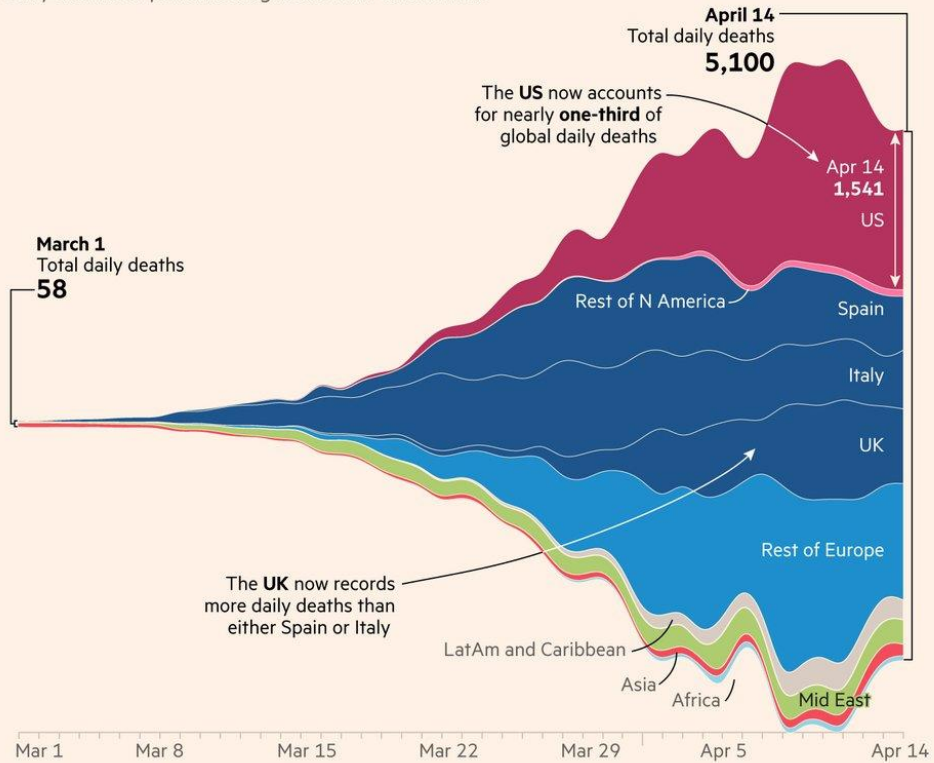
{ggstream}

Create Popular Streamgraph

github.com/davidsjoberg/ggstream

Focus of Covid-19 deaths has switched from Asia to Europe – and now the US

Daily deaths of patients diagnosed with coronavirus



FT graphic: Steven Bernard / @sdbernard
Source: FT analysis of ECDC

David Sjoberg

davidsjoberg

Unfollow

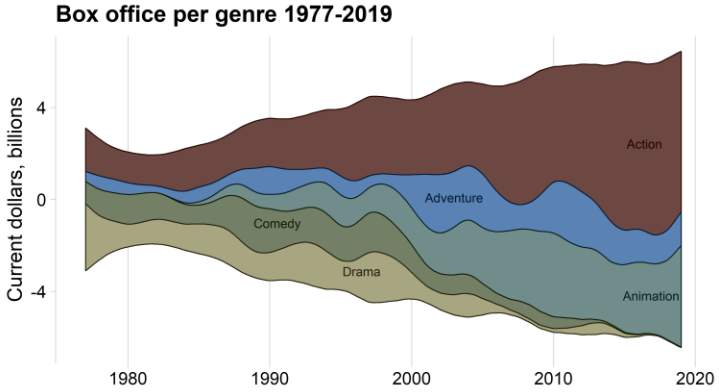
Happy R user. Twitter: @davsjob

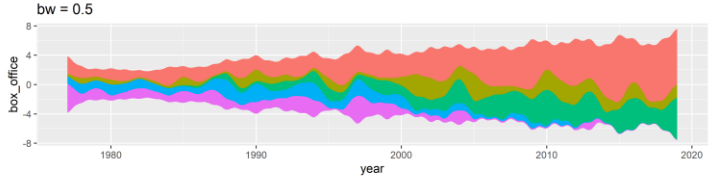
84 followers · 1 following · ☆ 15

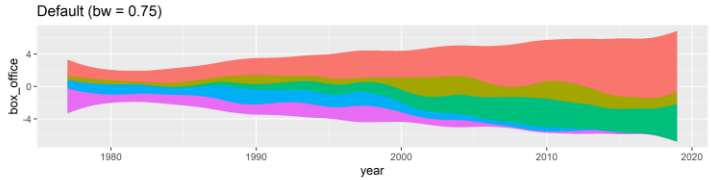
Stockholm, Sweden

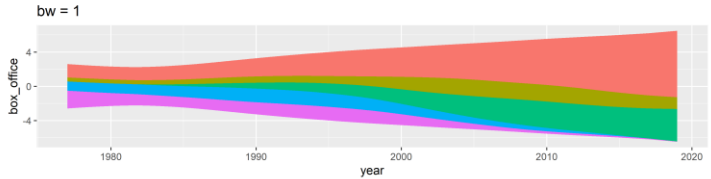
davsjob@gmail.com

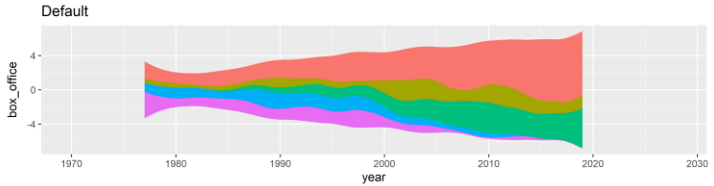
davidsjoberg.github.io

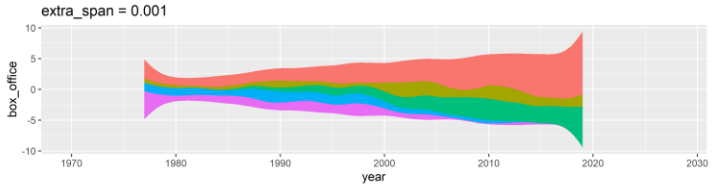


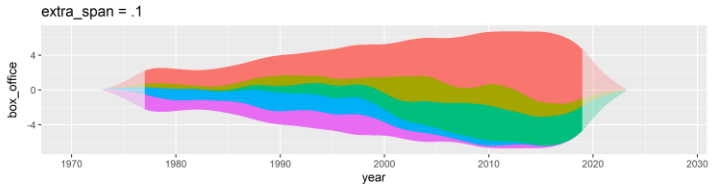


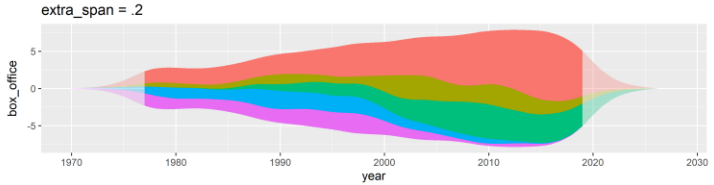


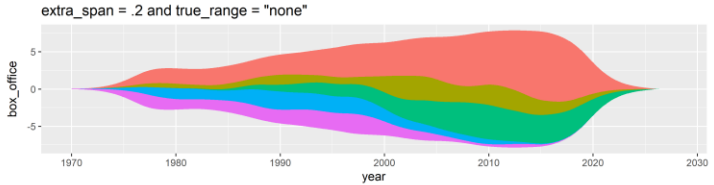


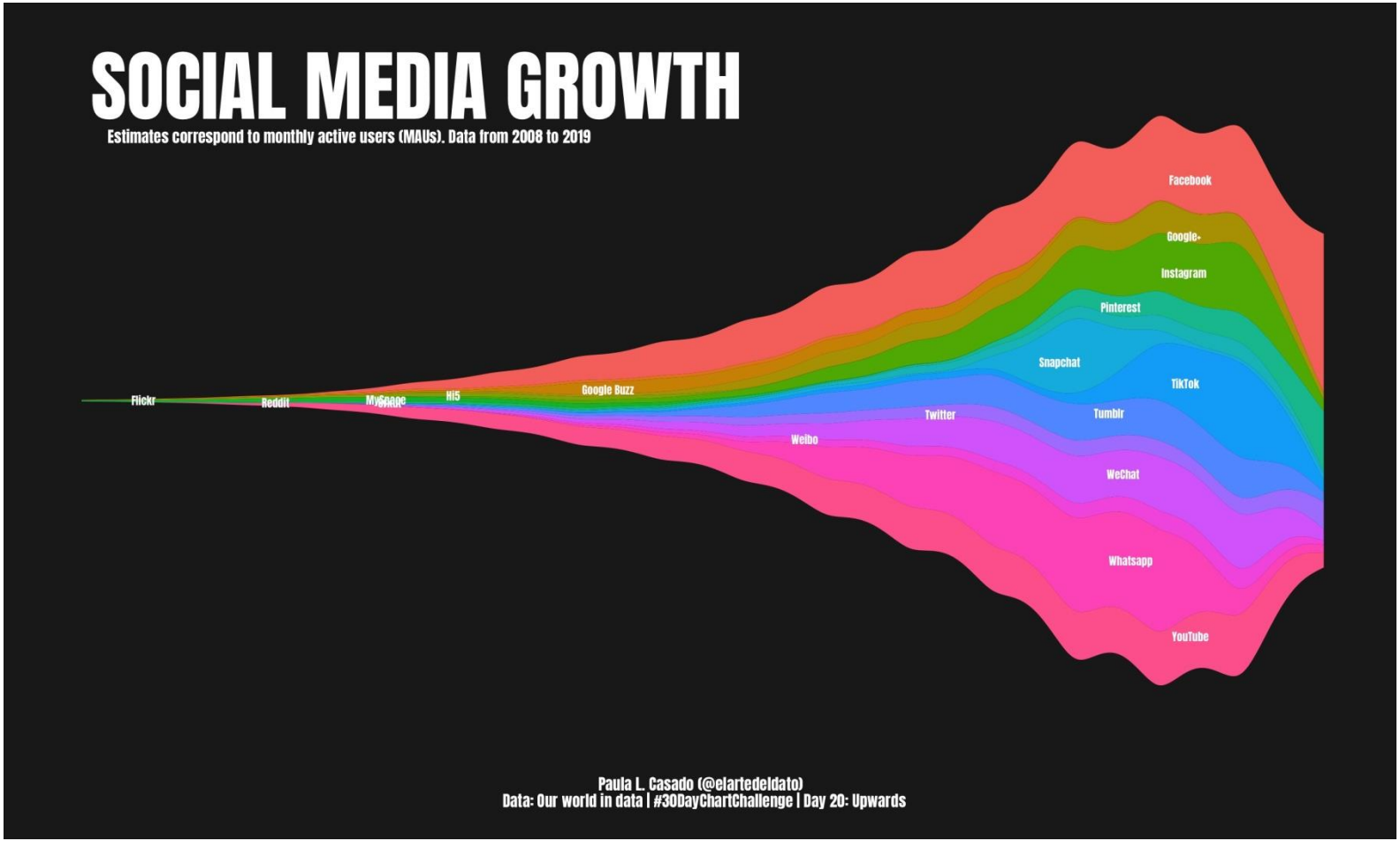




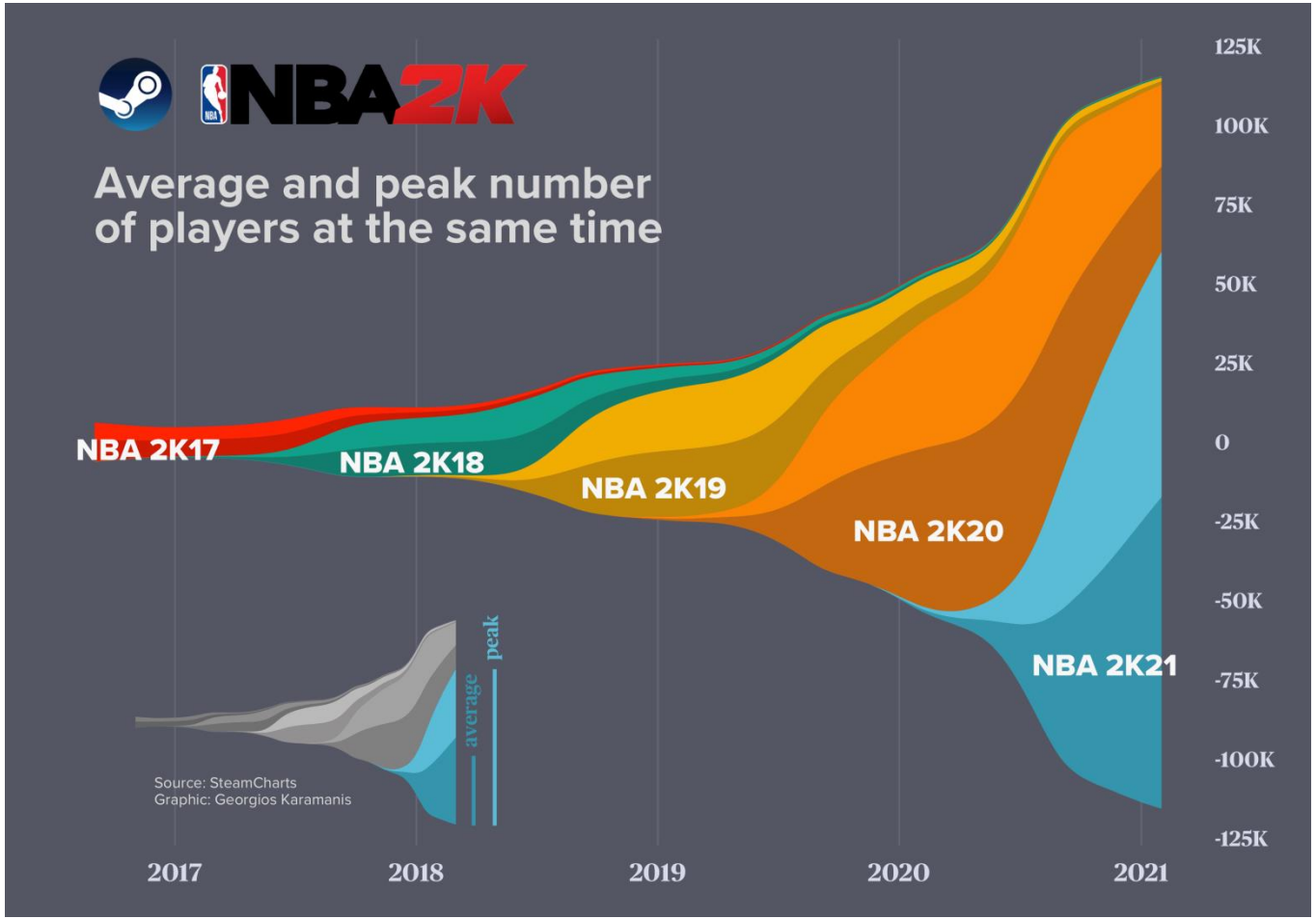




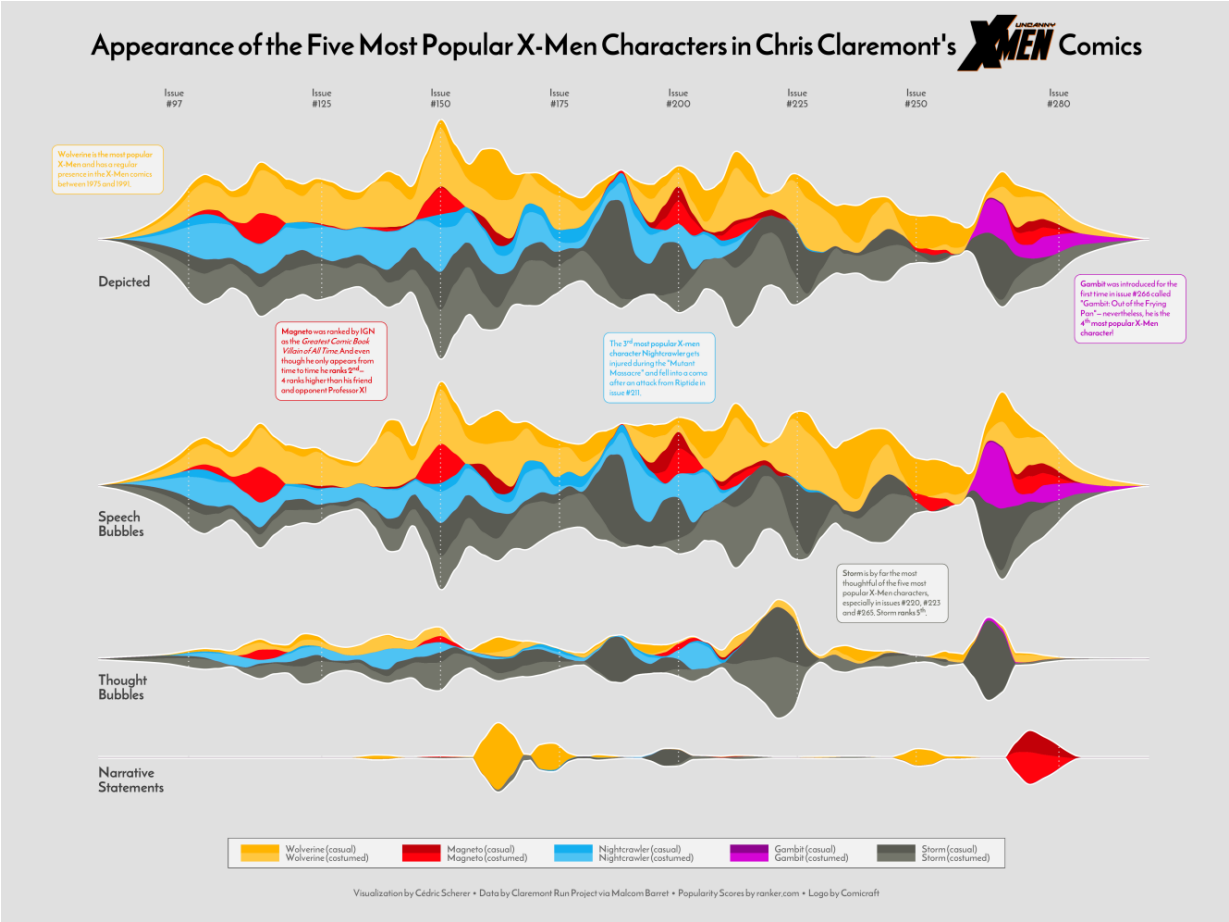




Paula Casado, Contribution to #30DayChartChallenge, Day 20: Upwards



Georgios Karamanis, Contribution to #TidyTuesday 2021/11



My Contribution to #TidyTuesday 2020/27

cedricscherer.com @CedScherer @z3tt @cedscherer

{ggsankey}

Create Sankey and Other Flow Charts

github.com/davidsjoberg/ggbump

David Sjoberg
davidsjoberg

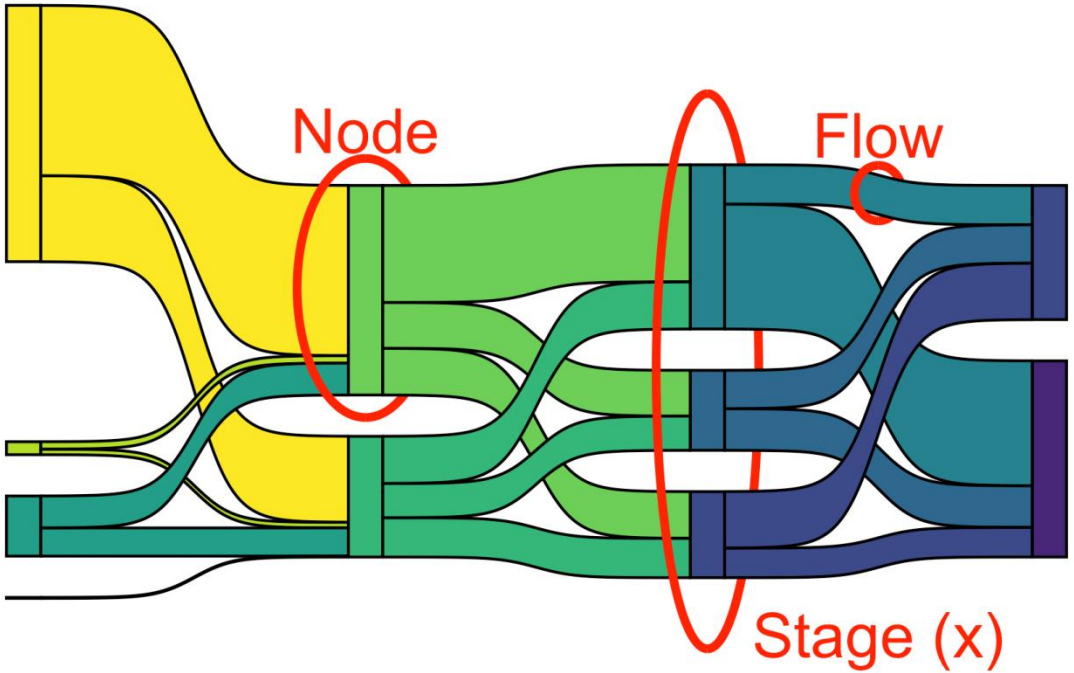
Unfollow

Happy R user. Twitter: @davsjob

84 followers · 1 following · ☆ 15

Stockholm, Sweden
davsjob@gmail.com
davidsjoberg.github.io

Principal aesthetics



David Sjoberg
davidsjoberg

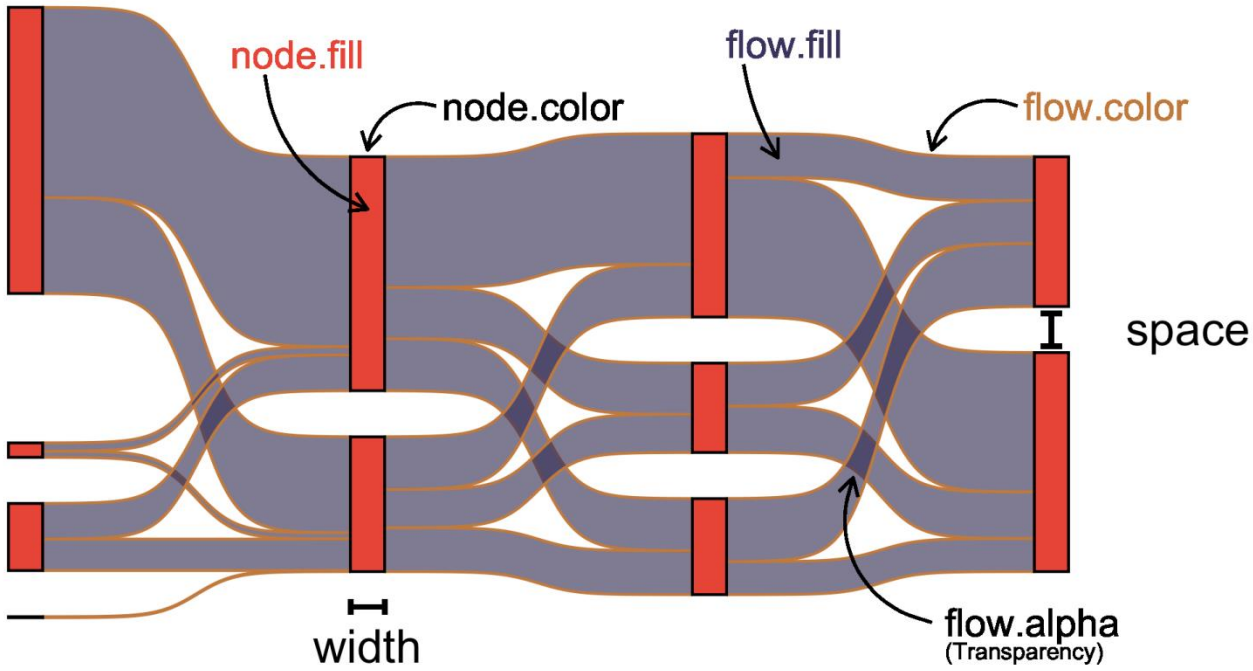
Unfollow

Happy R user. Twitter: @davsjob

84 followers · 1 following · ☆ 15

Stockholm, Sweden
davsjob@gmail.com
davidsjoberg.github.io

Control the geometries



David Sjoberg
davidsjoberg

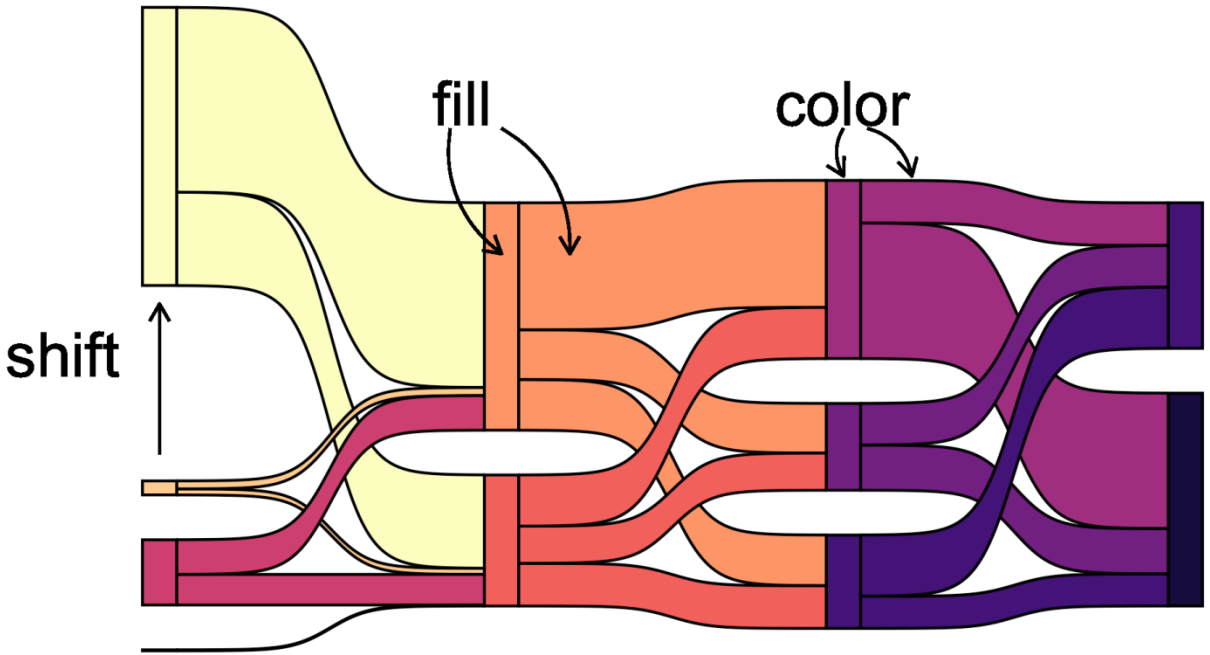
Unfollow

Happy R user. Twitter: @davsjob

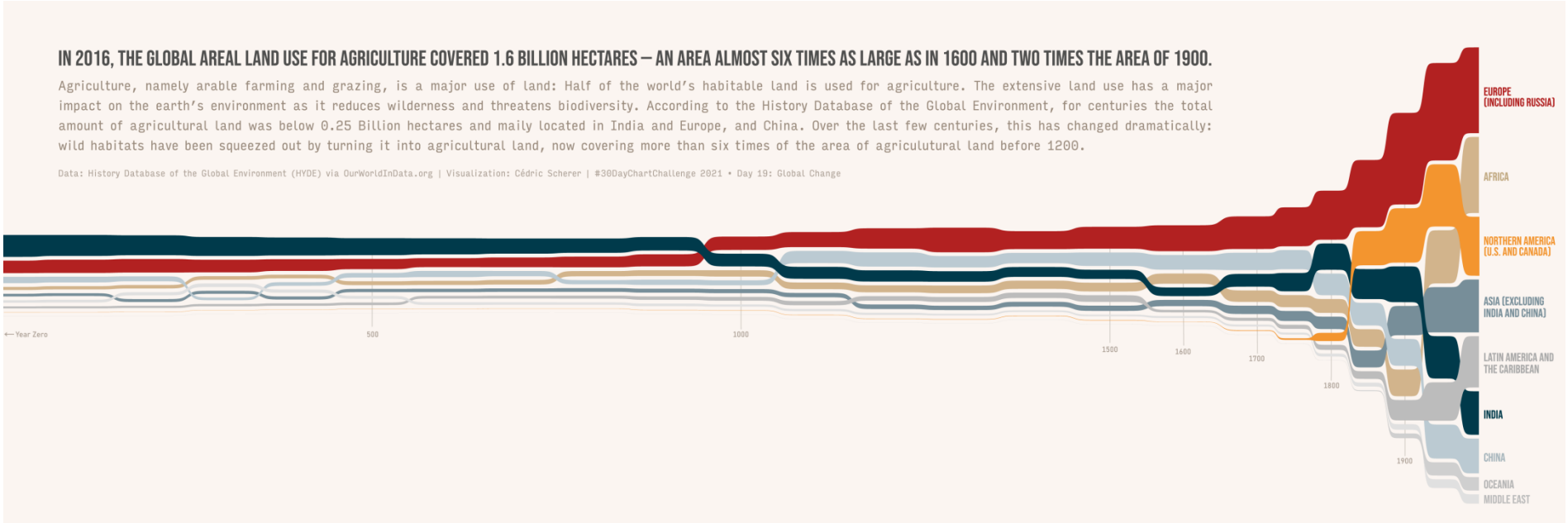
84 followers · 1 following · ☆ 15

Stockholm, Sweden
davsjob@gmail.com
davidsjoberg.github.io

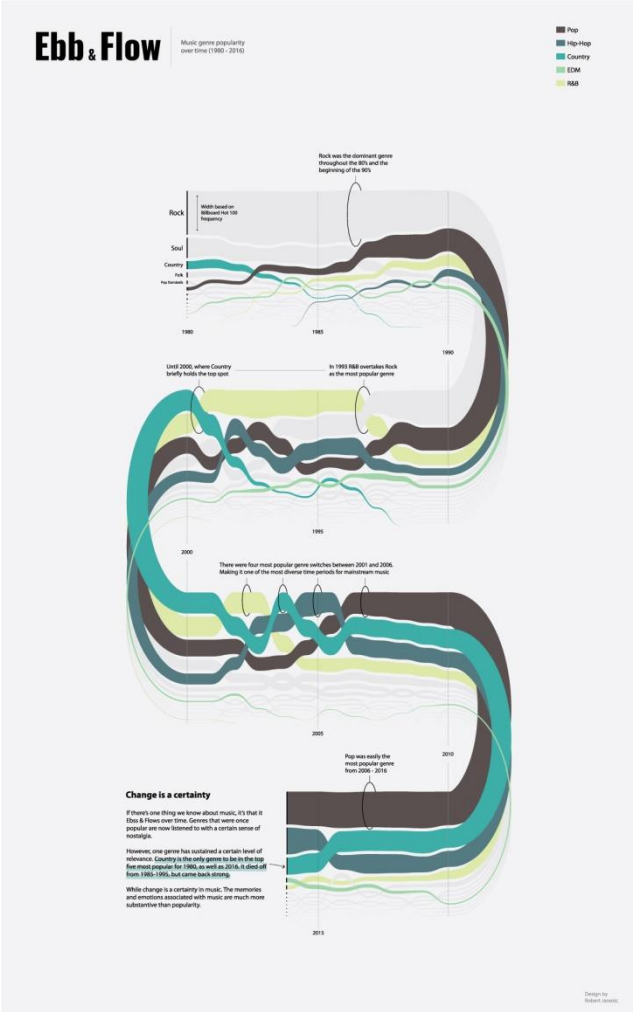
Additional aesthetics



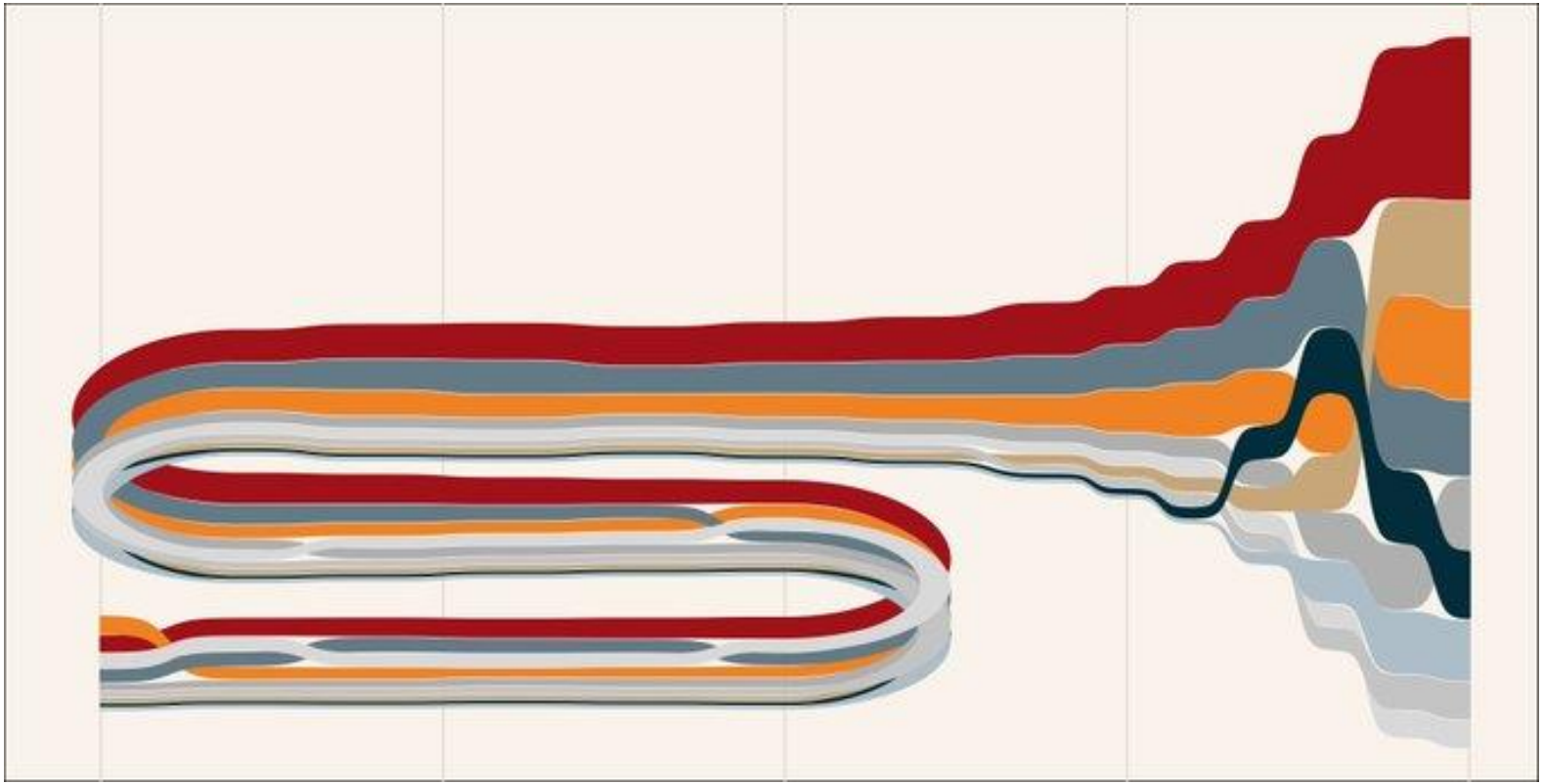
geom_sankey_bump()



My Contribution to #30DayChartChallenge 2021, Day 19: Global Change



Ebb & Flow by Robert Janezic



Trial Trumpet Plot by David Sjöberg

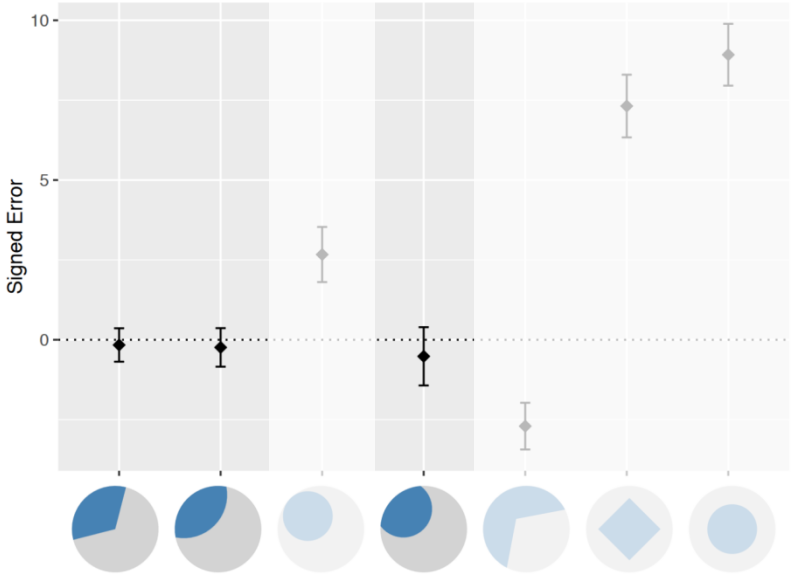
{gggibbous}

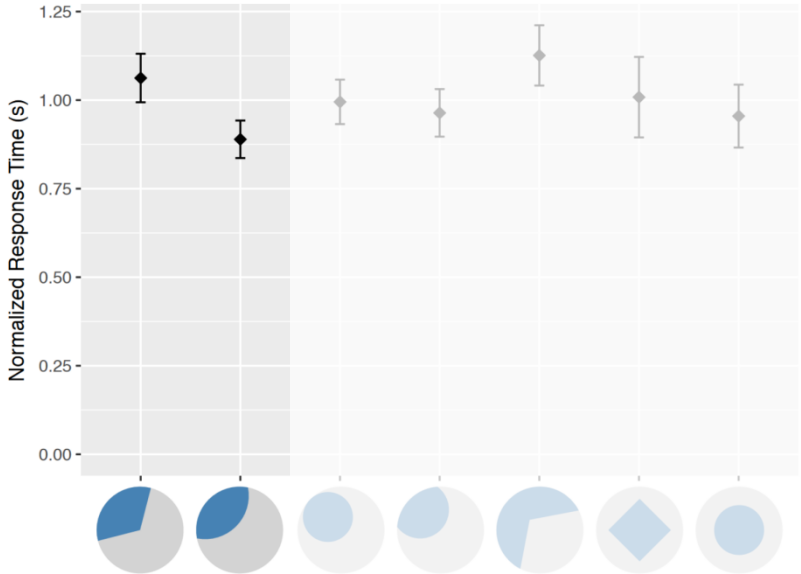
Create Moon Charts

cran.r-project.org/web/packages/gggibbous

Circular Part-to-Whole Charts Using the Area Visual Cue

Robert Kosara
Tableau Research

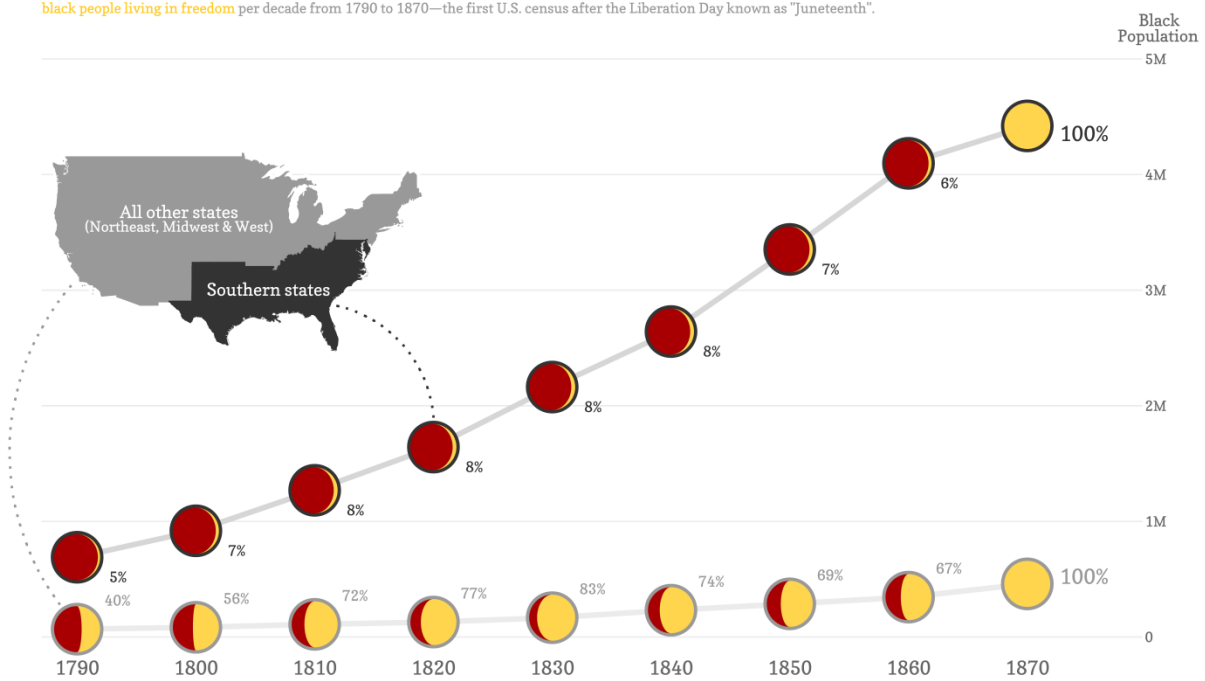




doi.org/10.2312/evs.20191163

AN ECONOMY BUILT ON SLAVERY—A FUTURE BUILD ON FREEDOM?

By 1680, property owners in the south of North America began establishing plantation farms for cash crops like tobacco, cotton, and sugar cane—enterprises that required increasing amounts of labor. To meet the need, wealthy planters became slave traders and imported ever more individuals to the colonies, the vast majority from West Africa. While the "Emancipation Proclamation" was made law as of 1863, slave owners in the South, namely Texas, still maintained slavery until June 19th 1865 when Union soldiers were able to enforce the law abolishing slavery in the region. The graphic below shows the share of black people in slavery, most of them enslaved in the Southern states, and black people living in freedom per decade from 1790 to 1870—the first U.S. census after the Liberation Day known as "Juneteenth".



#JUNETEENTH #BLACKLIVESMATTER

Graphic: Cédric Scherer • Source: U.S. Census Bureau

My Contribution to #TidyTuesday 2020/25

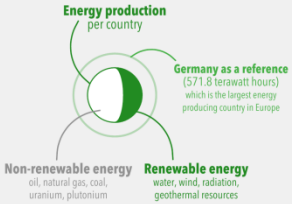
cedricscherer.com @CedScherer @z3tt @cedscherer

How European countries generated electricity in 2018

Germany is the largest energy producing country in Europe. It generates the most renewable and conventional thermal energy, representing 31% and 56% of its overall production respectively. **France** is the second largest energy European producer and by far the largest nuclear energy provider: 71% of its production is based on nuclear fission to generate heat.

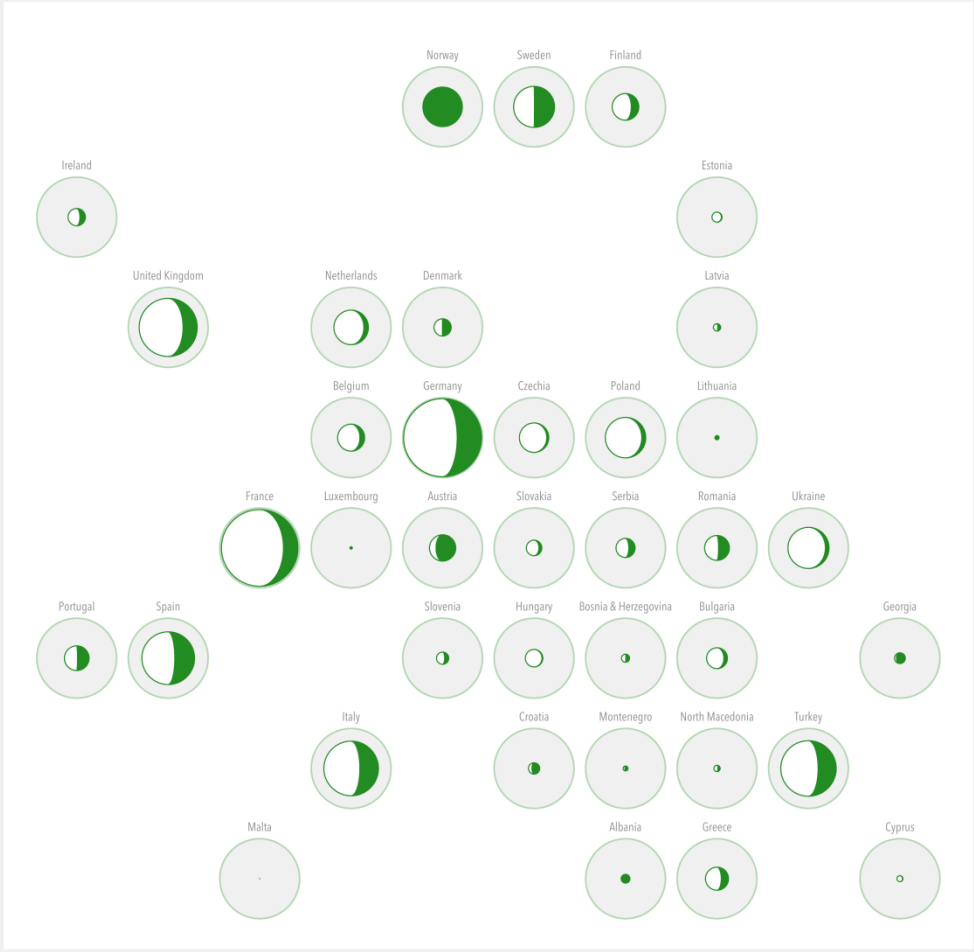
Renewable:	Nuclear:	Conventional thermal:
Germany	**France**	**Germany**
179.1 TWh	393.2 TWh	320.4 TWh
(31% of its production)	(71% of its production)	(56% of its production)

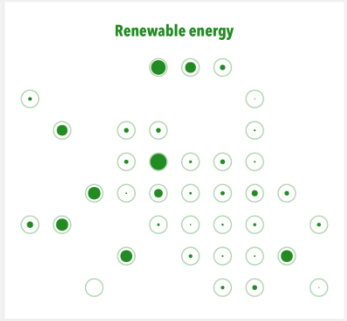
Renewable energy is energy that comes from resources that are naturally replenished such as sunlight, wind, water, and geothermal heat. Unlike fossil fuels, such as oil, natural gas and coal, or nuclear power sources such as uranium and plutonium, renewable energy regenerates naturally in a short period of time.

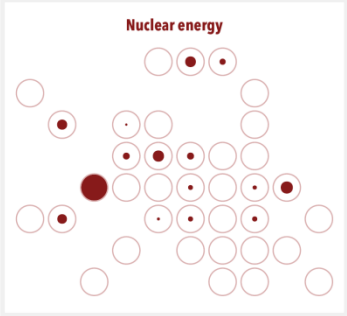


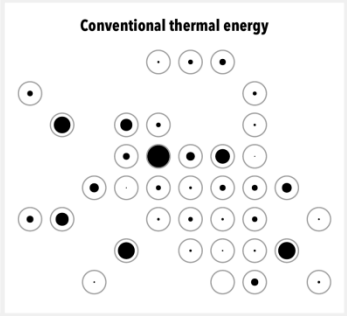
Norway had an electricity production almost entirely made up of renewable energy (98%). This makes Norway the second largest producer of this energy type in Europe. Interestingly, most of the renewable energy is produced by hydro power that take up 95% and only 3% by wind. In contrast, twelve European countries were reported to produce less than 20% of their energy with renewable resources: **Malta** (0%), **Hungary** (5%), **Estonia** (6%), **Czechia** (7%), **Cyprus** (9%), **Ukraine** (9%), **Poland** (10%), **Netherlands** (13%), **Bulgaria** (17%), **Belgium** (18%), **Slovakia** (19%), and **France** (19%).

Note: Energy production is mapped to the area of the circles.
Visualization by Cédric Scherer • Data by Eurostat









My Contribution to #TidyTuesday 2020/32

cedricscherer.com @CedScherer @z3tt @cedscherer

{ggdist}

Visualize Distributions and Uncertainty

mjskay.github.io/ggdist

Matthew Kay
mjskay

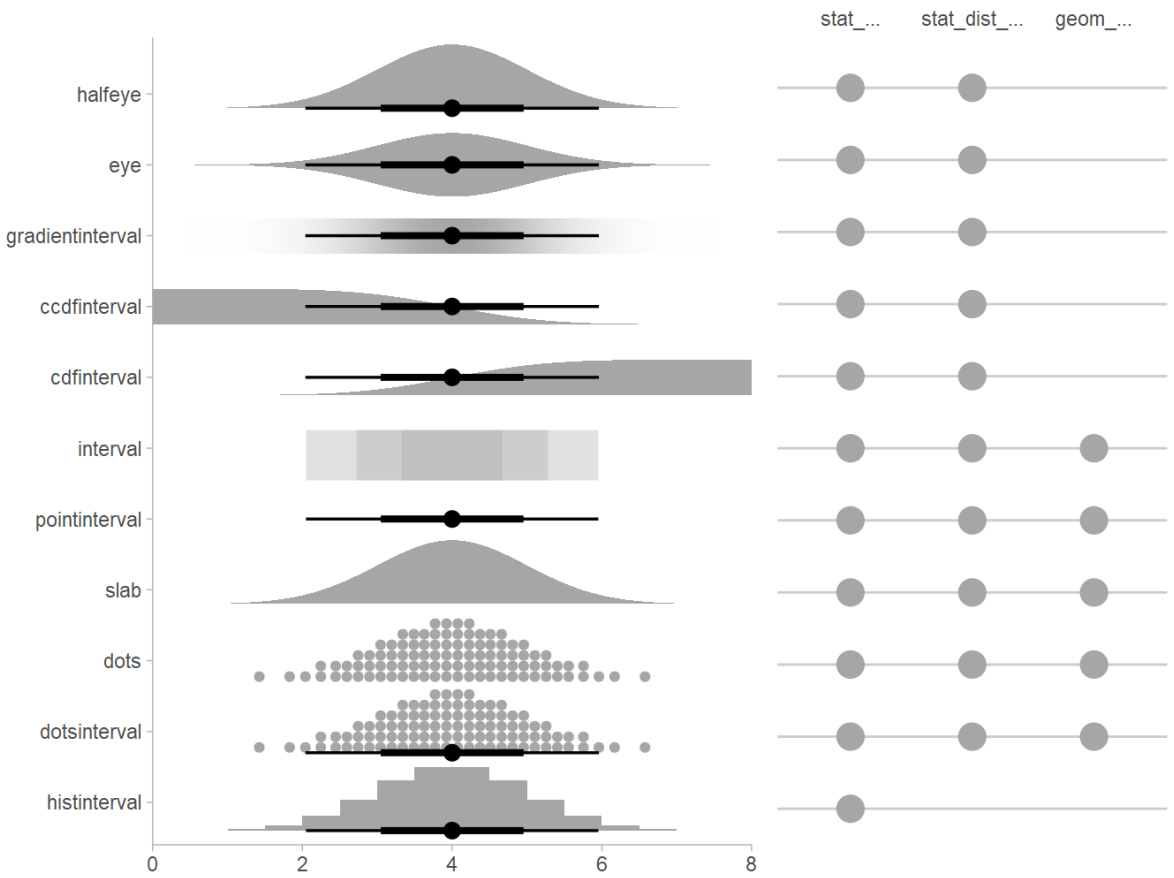
Unfollow

Assistant Professor at Northwestern; works on human-computer interaction, information visualization, communicating uncertainty

240 followers · 0 following · ☆ 16

Northwestern University
Chicago
mjskay@northwestern.edu
http://www.mjskay.com/
@mjskay

The stat_slabinterval / geom_slabinterval family

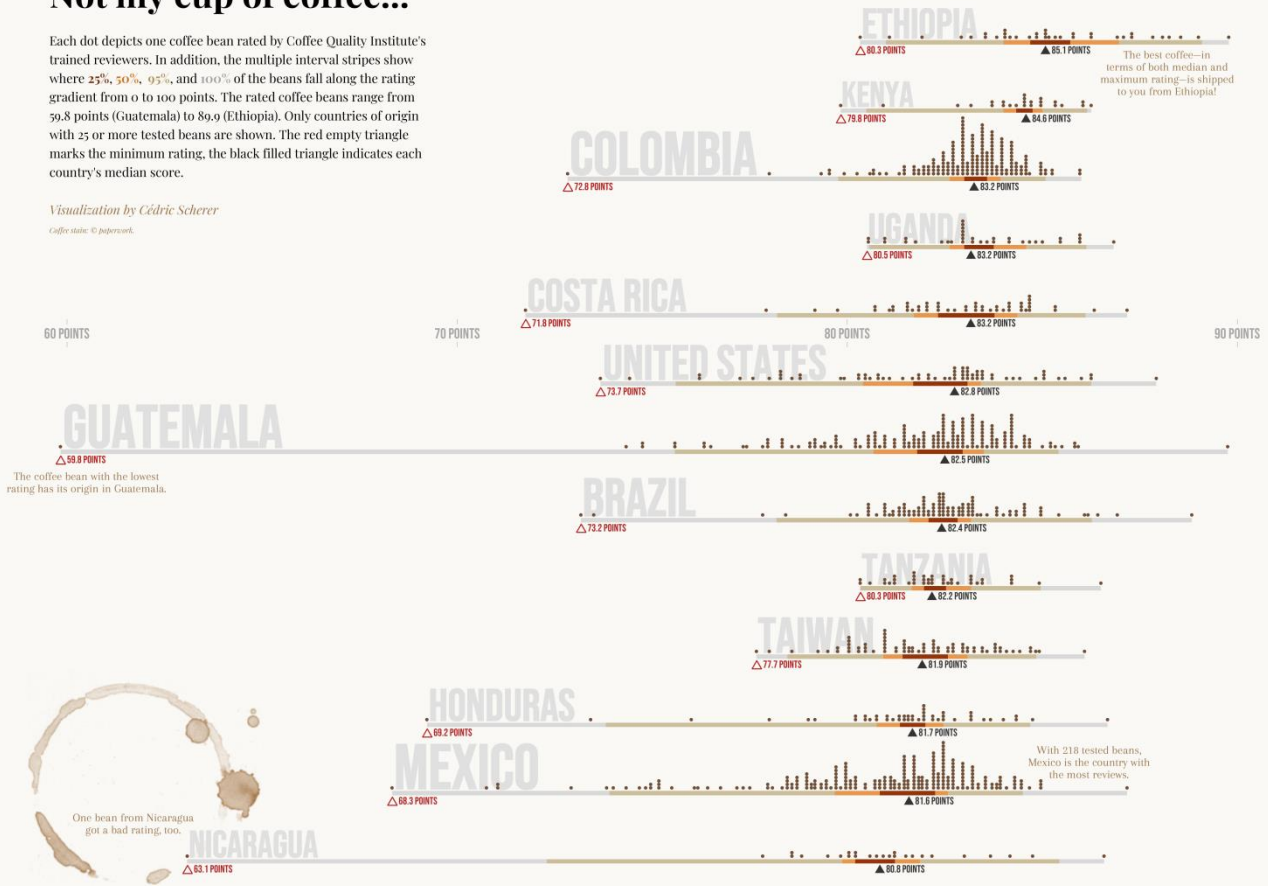


Not my cup of coffee...

Each dot depicts one coffee bean rated by Coffee Quality Institute's trained reviewers. In addition, the multiple interval stripes show where 25%, 50%, 95%, and 100% of the beans fall along the rating gradient from 0 to 100 points. The rated coffee beans range from 59.8 points (Guatemala) to 89.9 (Ethiopia). Only countries of origin with 25 or more tested beans are shown. The red empty triangle marks the minimum rating, the black filled triangle indicates each country's median score.

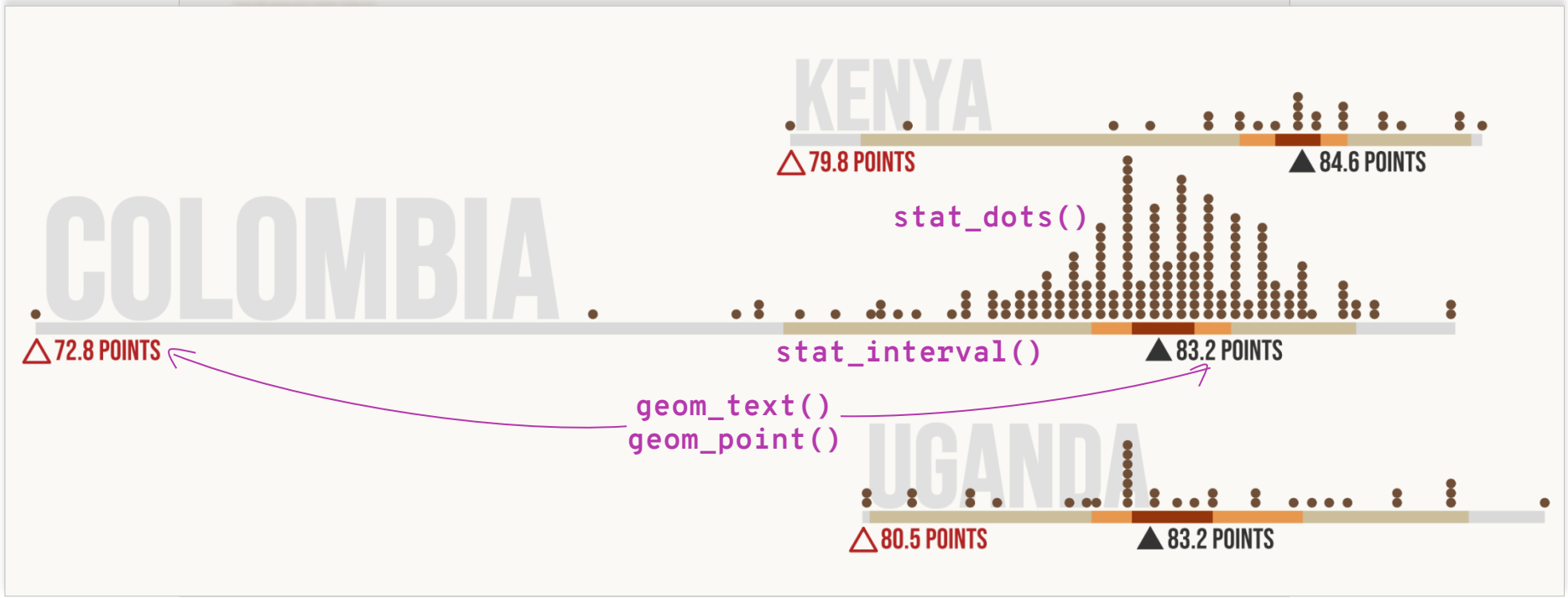
Visualization by Cédric Scherer

Coffee stain: © Jupiterwork.



Contribution to #TidyTuesday 2020/28

cedricscherer.com @CedScherer @z3tt @cedscherer

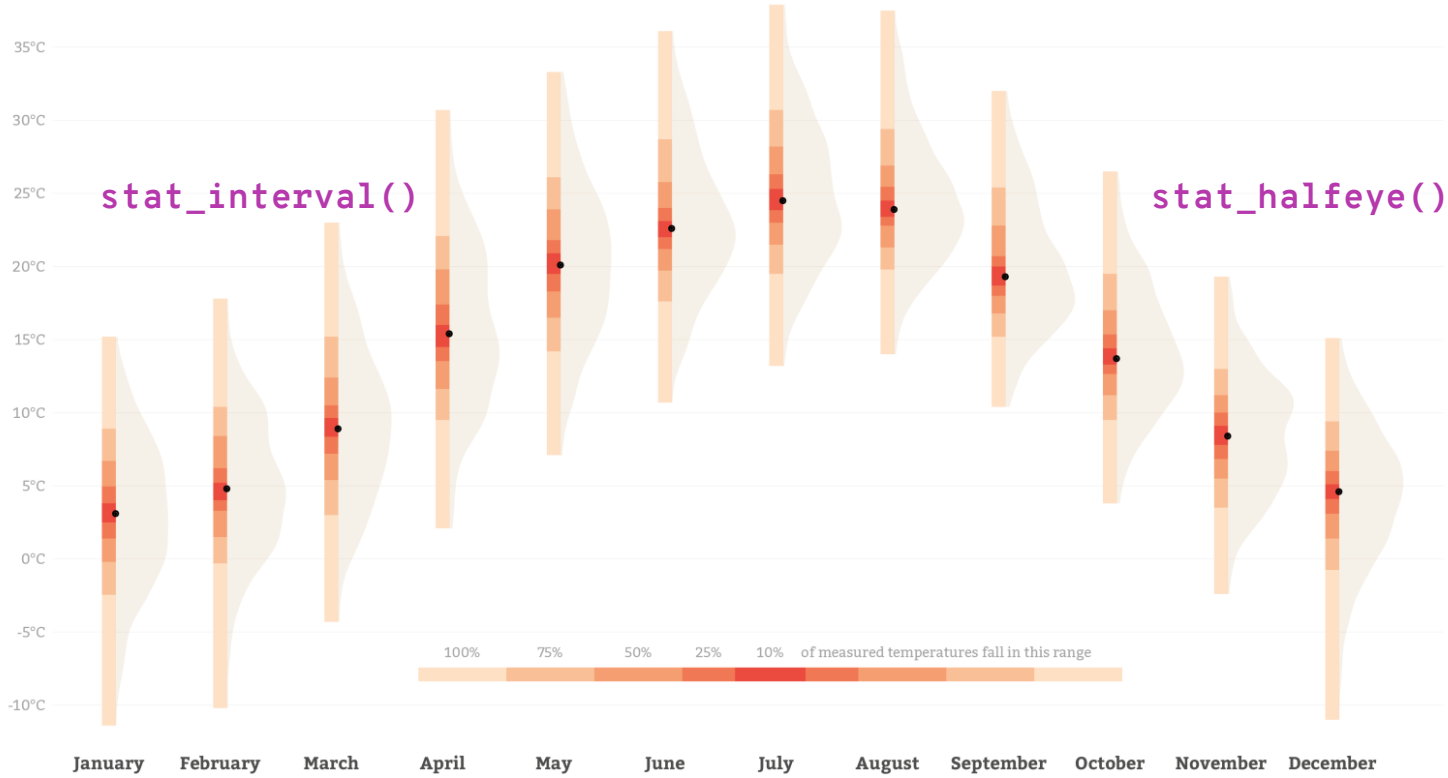


Contribution to #TidyTuesday 2020/28

cedricscherer.com @CedScherer @z3tt @cedscherer

Daily Temperatures in Berlin, Germany

Range and distribution of maximum daily temperatures in Celsius per month from 2000 to 2018 measured in Berlin-Dahlem, Germany



Visualization by Cédric Scherer | Data: DWD (Deutscher Wetterdienst)

Contribution to the SWD Challenge September 2019

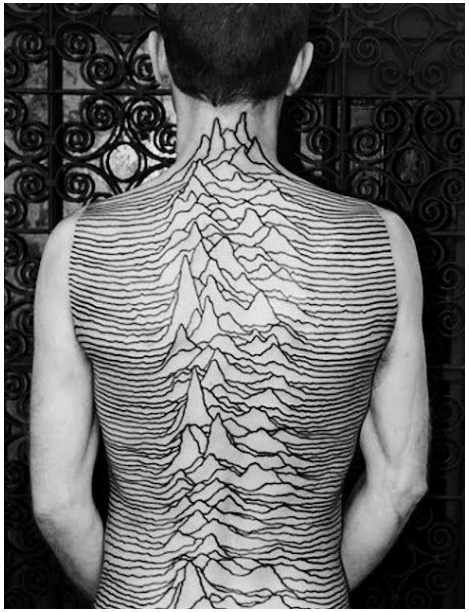
cedricscherer.com @CedScherer @z3tt @cedscherer

{ggridges}

Create Ridgeline Plots

wilkelab.org/ggridges

The cover of Joy Division's "Unknown Pleasures" LP



Koen Van den Eeckhout, Contribution to
#30DayChartChallenge, Day 20: Population

~~Joy Plot~~

Ridgeline Plot

clauswilke.com/blog/2017/09/15/goodbye-joyplots/

Claus Wilke

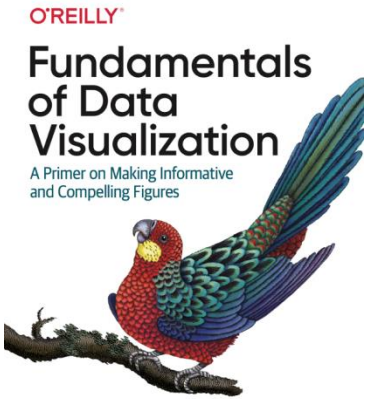
clauswilke

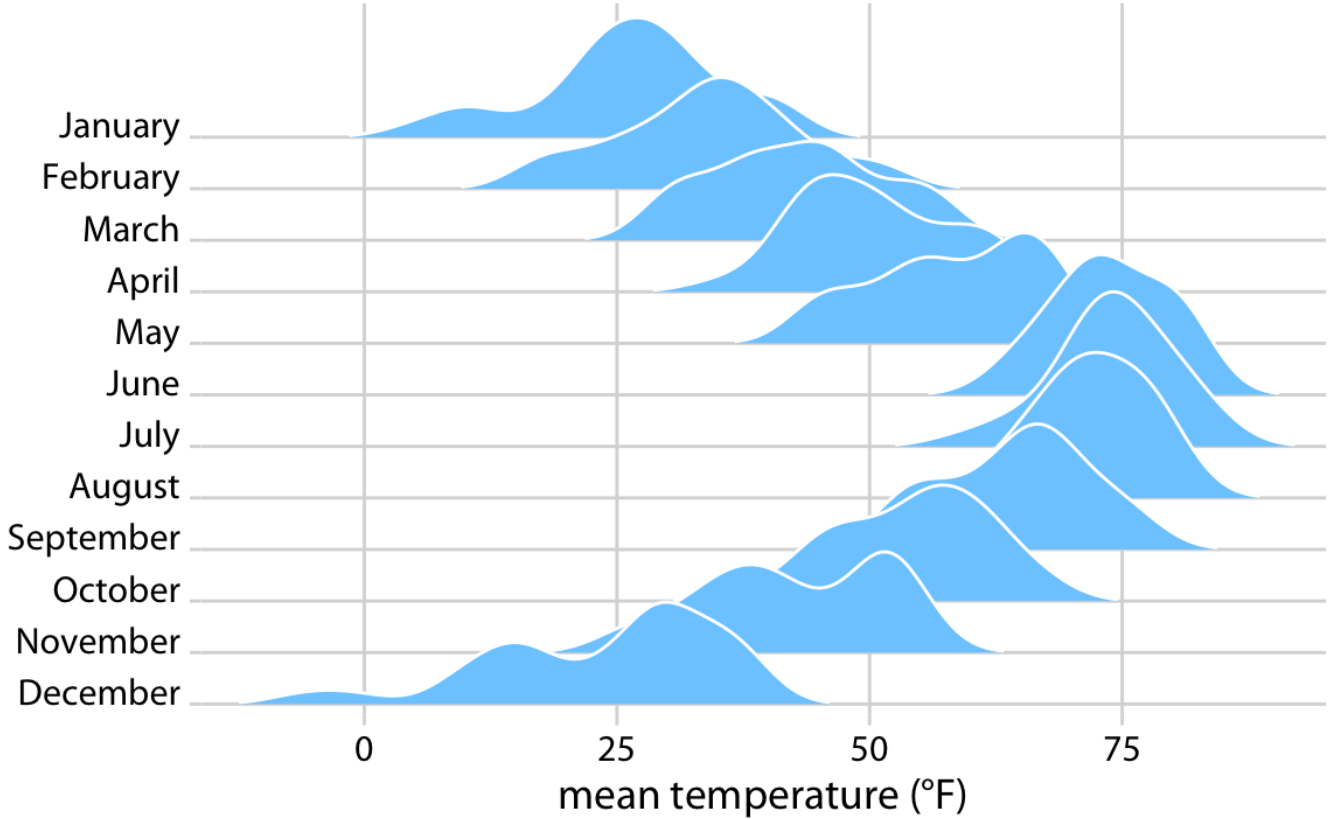
Unfollow

910 followers · 39 following · ☆ 20

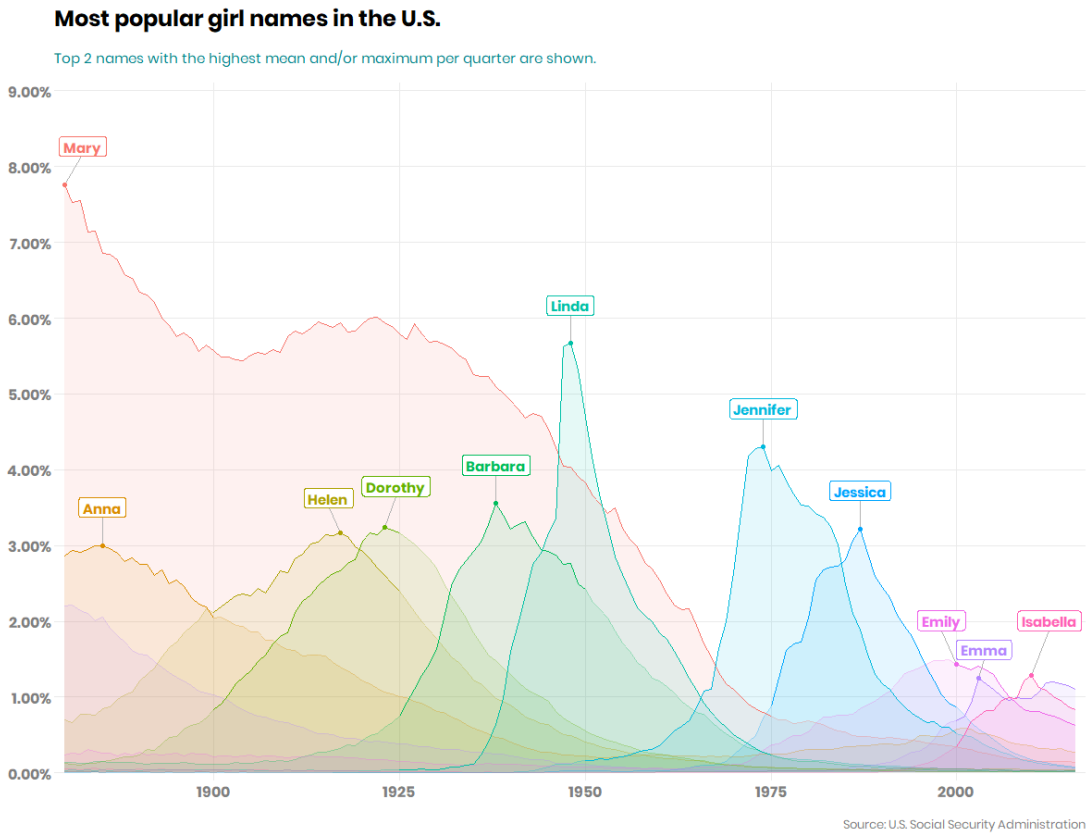
The University of Texas at Austin

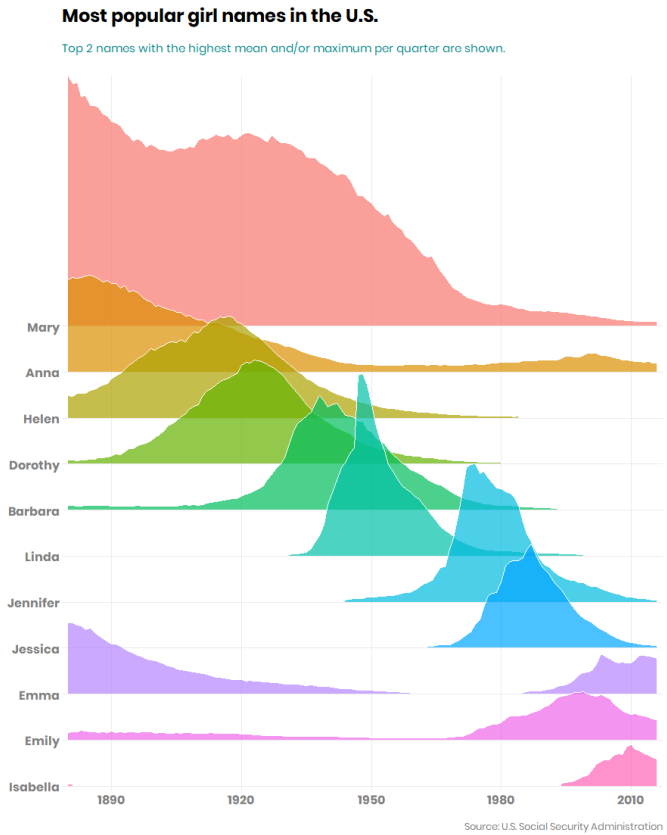
http://wilkelab.org



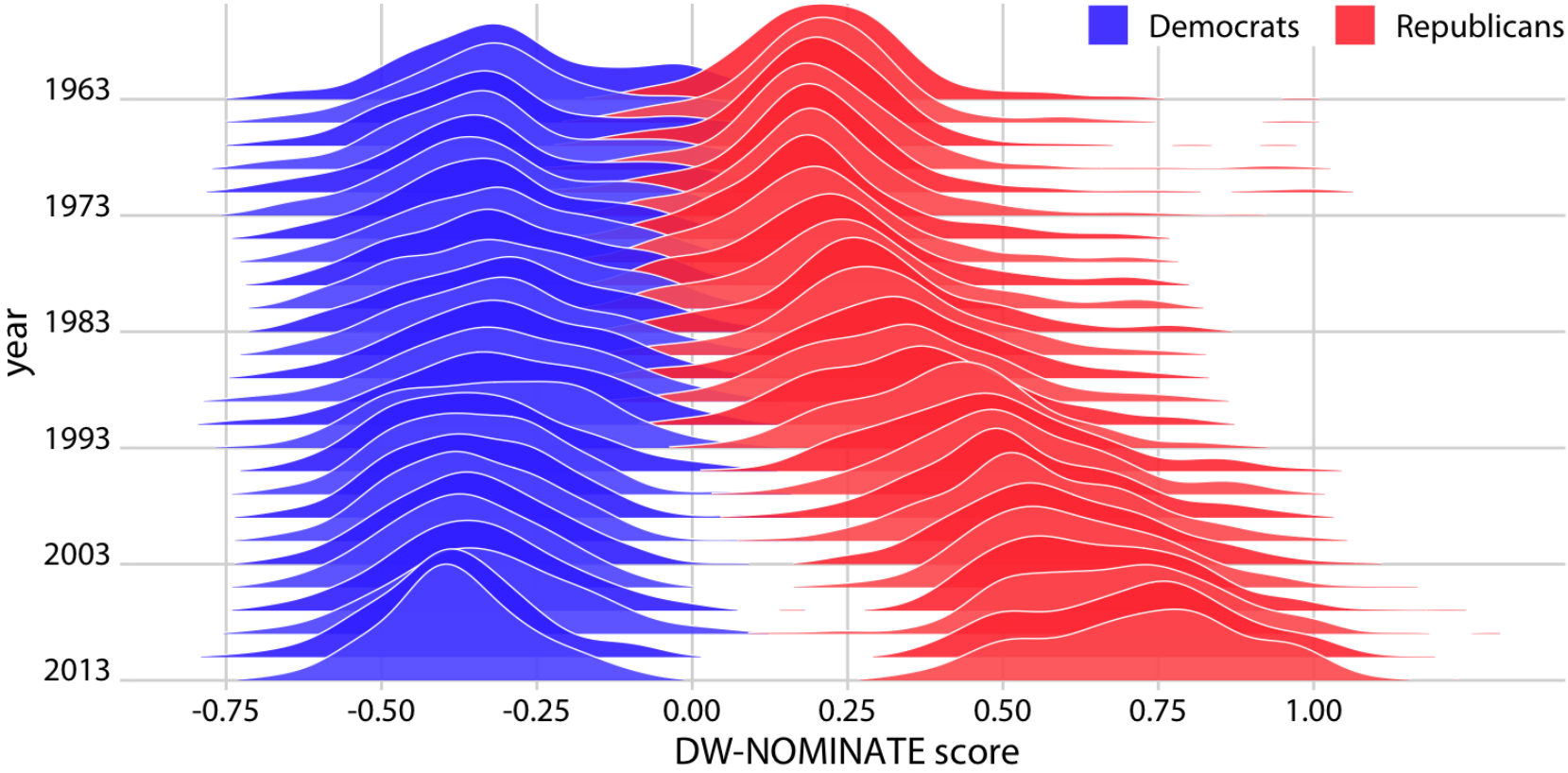


From "Fundamentals of Data Visualization" by Claus O. Wilke





Personal Project



From “Fundamentals of Data Visualization” by Claus O. Wilke

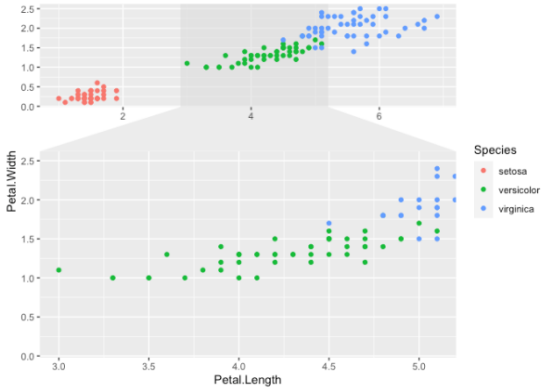
Streamgraph	{ggstream}	geom_stream()
Sankey Diagram	{ggsankey}	geom_sankey(), geom_sankey_bump()
Moon Chart	{ggdist}	stat_eye(), stat_interval(), stat_dots(), …
Uncertainty Chart	{gggibbous}	geom_moon()
Ridgeline Plot	{ggridges}	geom_ridgeline(), geom_density_ridges()
Waffle Chart	{waffle} | {ggwaffle}	geom_waffle()
Bump Chart	{ggbump}	geom_bump(), geom_sigmoid_*()
Parliament Diagram	{ggpol}	geom_parliament()
Beeswarm Plot	{ggbeeswarm}	geom_beeswarm(), geom_quasirandom()
Sina Plot	{ggforce}	geom_sina()
Voronoi Map	''	geom_voronoi_segment(), geom_voronoi_tile()
Pie Chart	''	geom_arc_bar()
Parallel Sets	''	geom_parallel_sets()
Alluvial Chart	{ggalluvial}	geom_alluvium(), geom_stratum()
Network Graph	{ggraph}	geom_edge_*(), geom_node_*()
Horizon Chart	{ggalt}	geom_horizon()
Dumbbell Plot	''	geom_dumbbell()
Lollipop Plot	''	geom_lollipop()

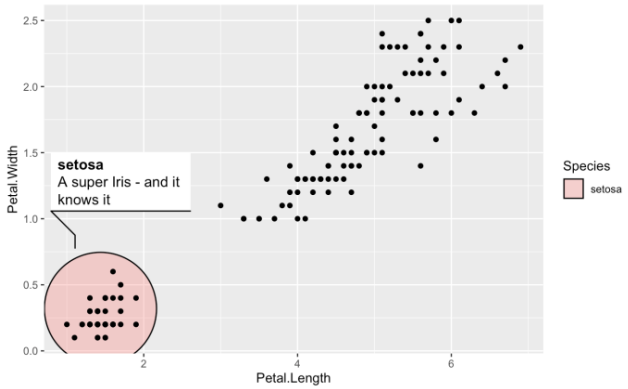
Labeling

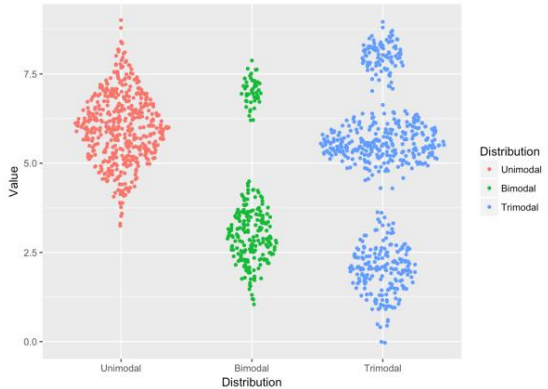
{ggforce}

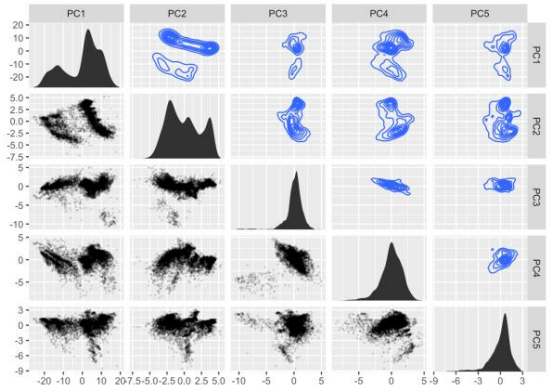
Providing Missing Functionality

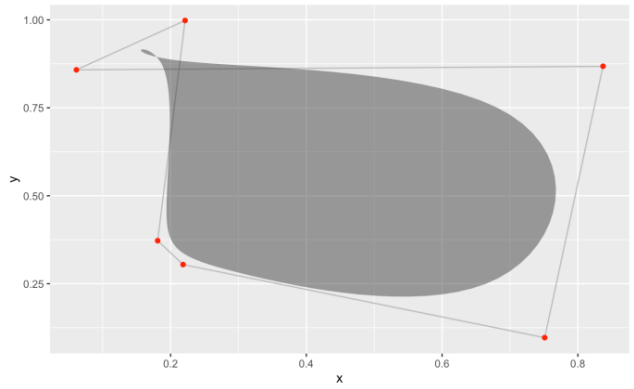
ggforce.data-imaginist.com

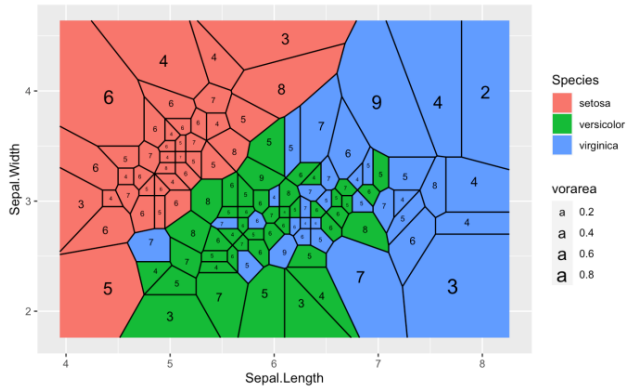

Petal.Width
Petal.Length
Species
setosa
versicolor
virginica


setosa
A super Iris - and it knows it
Petal.Width
Petal.Length
Species
setosa

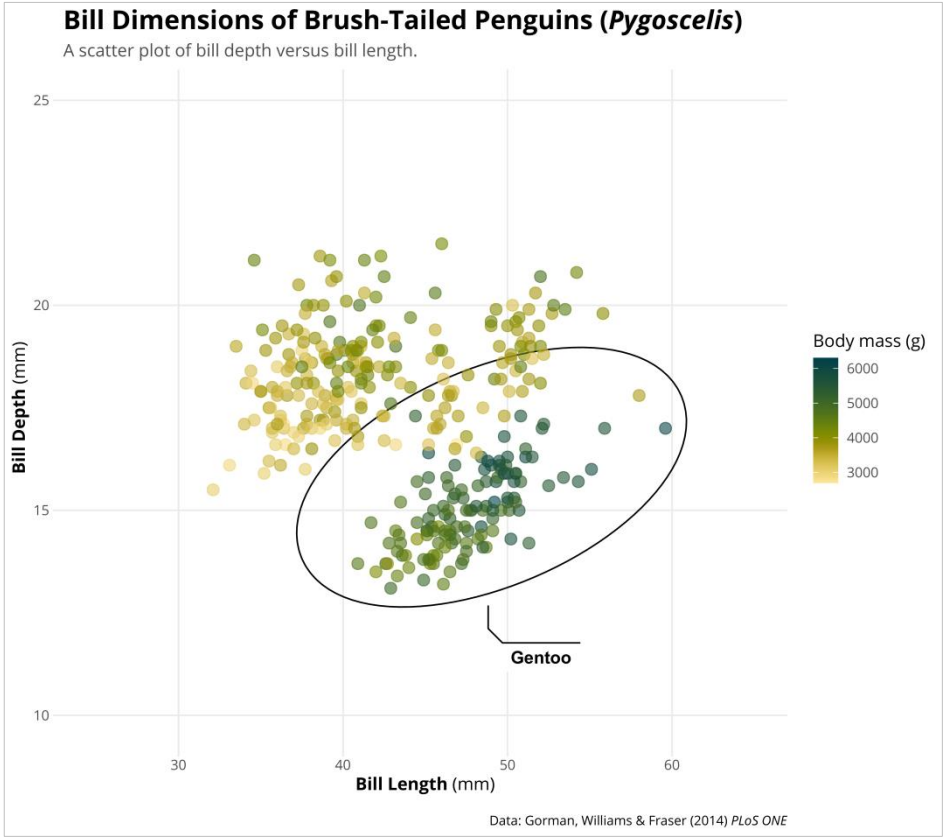

Value
Unimodal
Bimodal
Trimodal
Distribution
Distribution
Unimodal
Bimodal
Trimodal


PC1
PC2
PC3
PC4
PC5

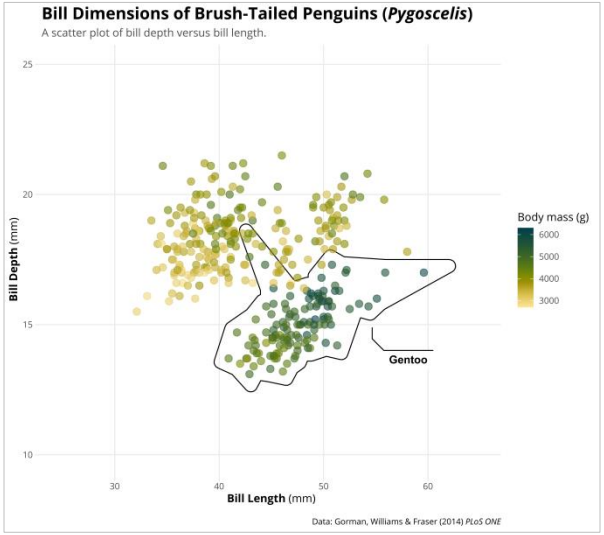

y
x


Sepal.Width
Sepal.Length
Species
setosa
versicolor
virginica
vorarea
a 0.2
a 0.4
a 0.6
a 0.8

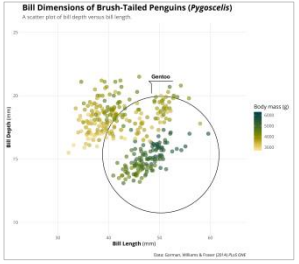
`geom_mark_*()` adds advanced labels for single or multiple points



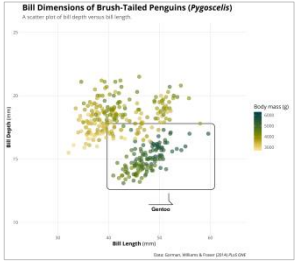
`geom_mark_ellipsoid()`



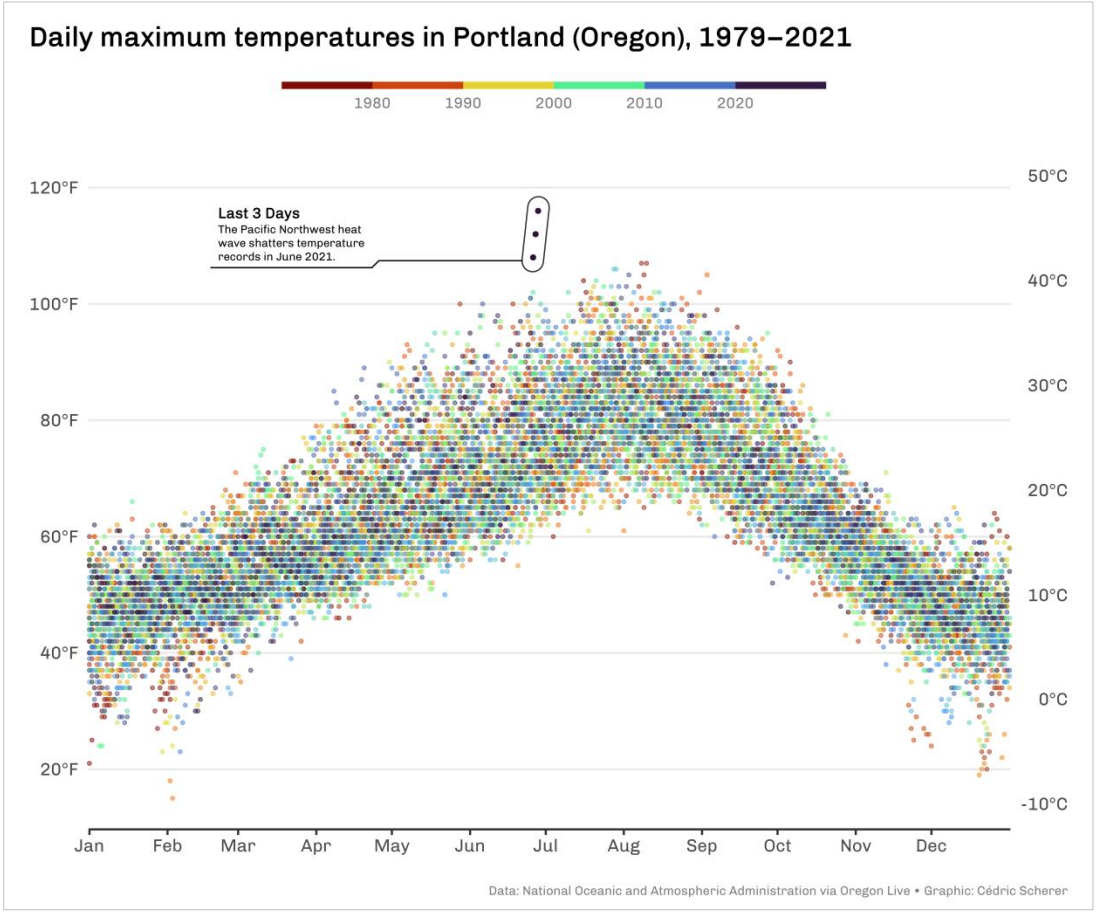
`geom_mark_hull()`



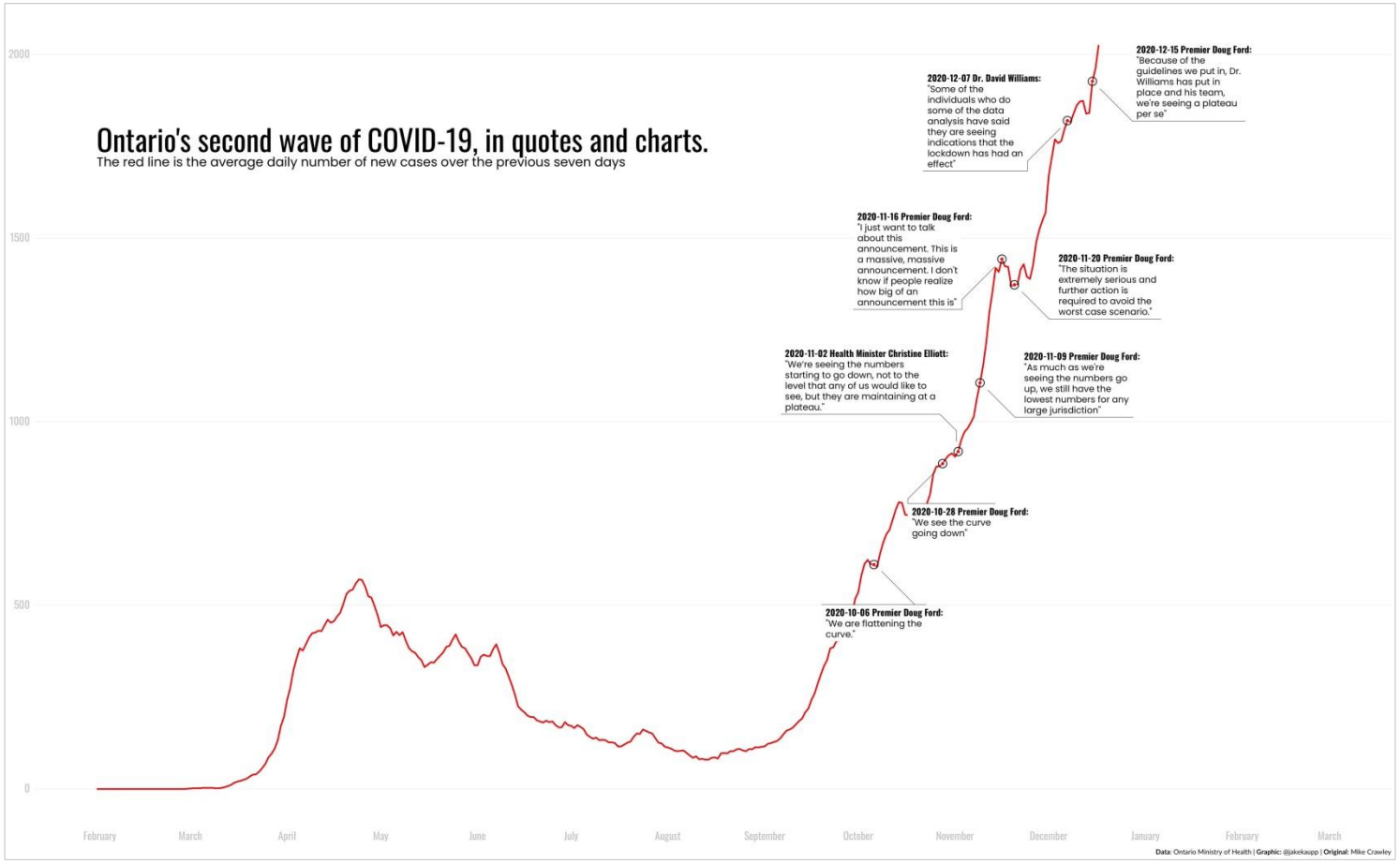
`geom_mark_circle()`



`geom_mark_rect()`

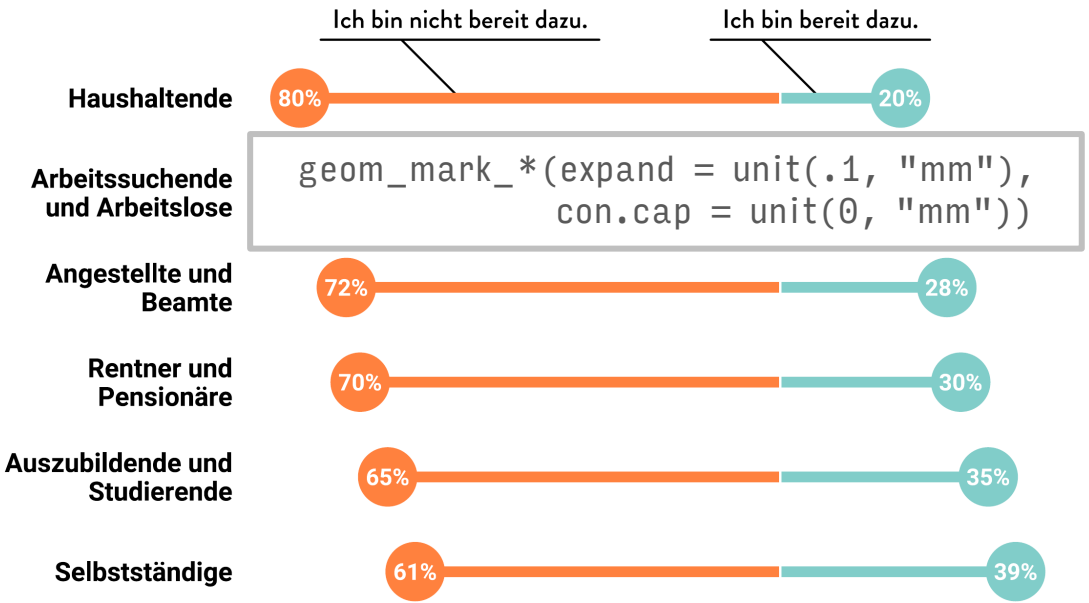


Personal Project


Ontario's second wave of COVID-19, in quotes and charts.
The red line is the average daily number of new cases over the previous seven days
2000
1500
1000
500
0
February
March
April
May
June
July
August
September
October
November
December
January
February
March
2020-12-15 Premier Doug Ford: "Because of the guidelines we put in, Dr. Williams has put in place and his team, we're seeing a plateau per se"
2020-12-07 Dr. David Williams: "Some of the individuals who do some of the data analysis have said they are seeing indications that the lockdown has had an effect"
2020-11-20 Premier Doug Ford: "The situation is extremely serious and further action is required to avoid the worst case scenario."
2020-11-16 Premier Doug Ford: "I just want to talk about this announcement. This is a massive, massive announcement. I don't know if people realize how big of an announcement this is"
2020-11-09 Premier Doug Ford: "As much as we're seeing the numbers go up, we still have the lowest numbers for any large jurisdiction"
2020-11-02 Health Minister Christine Elliott: "We're seeing the numbers starting to go down, not to the level that any of us would like to see, but they are maintaining at a plateau."
2020-10-28 Premier Doug Ford: "We see the curve going down"
2020-10-06 Premier Doug Ford: "We are flattening the curve."
Data: Ontario Ministry of Health | Graphic: @jakekaupp | Original: Mike Crawley

Jake Kaupp

Die Präsidentin der EU Ursula von der Leyen bittet “finanziell nicht notleidende Kunden" ihr Recht auf Rückerstattung aus Solidarität nicht in Anspruch zu nehmen.



Basierend auf 1057 Antworten auf eine Umfrage von KUENDIGUNG.ORG

Customer survey Kuendigung.org
(kuendigung.org/studien/verbraucherumfrage-zur-zukunft-nach-der-krise)

{ggrepel}

Avoid Overlapping Text Labels

ggrepel.slowkow.com/

ggrepel

Wonderfully Repulsive Labels.

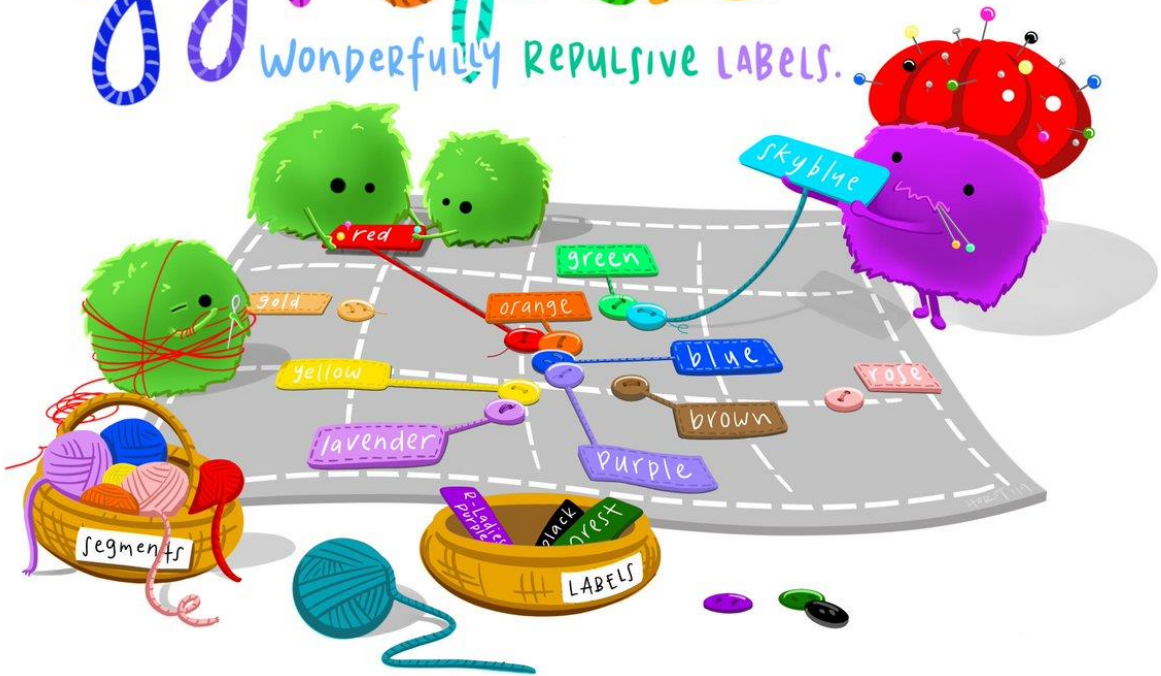


Illustration by Allison Horst

Kamil Slowikowski
slowkow

Unfollow

Computational biologist. Using transcriptomics to learn about inflammation and cancer.

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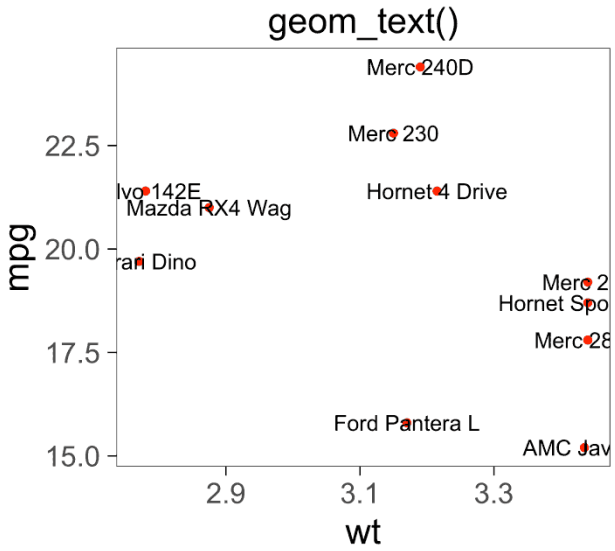
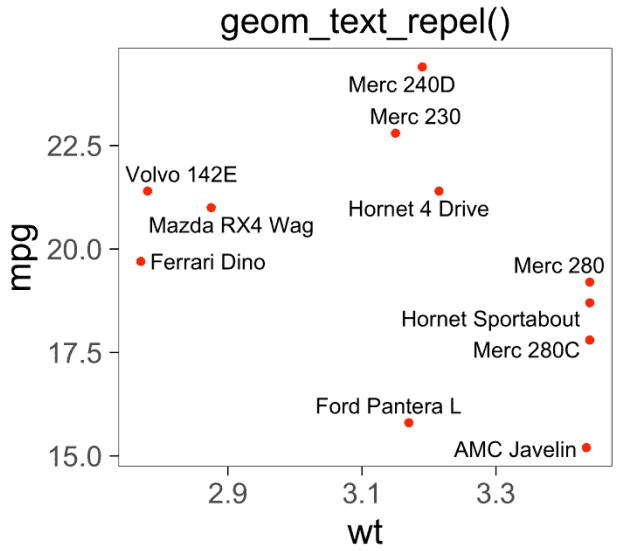
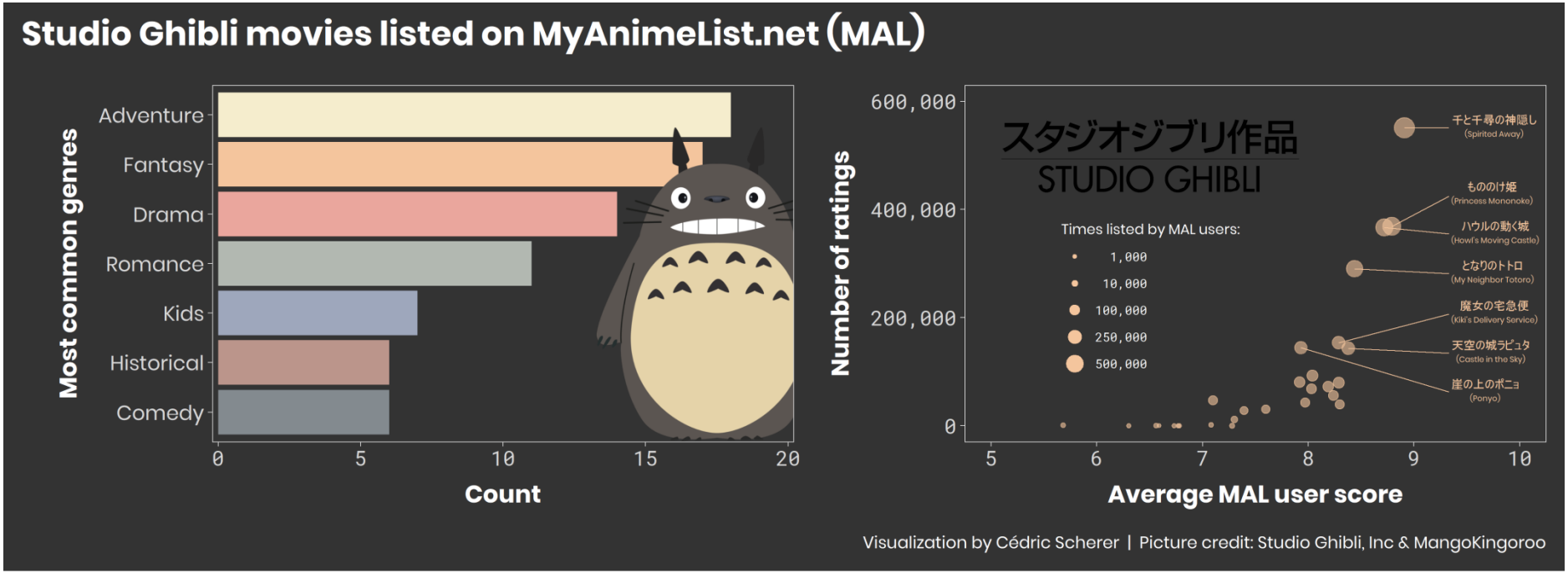
Massachusetts General Hospital
kslowikowski@gmail.com
https://slowkow.com
@slowkow

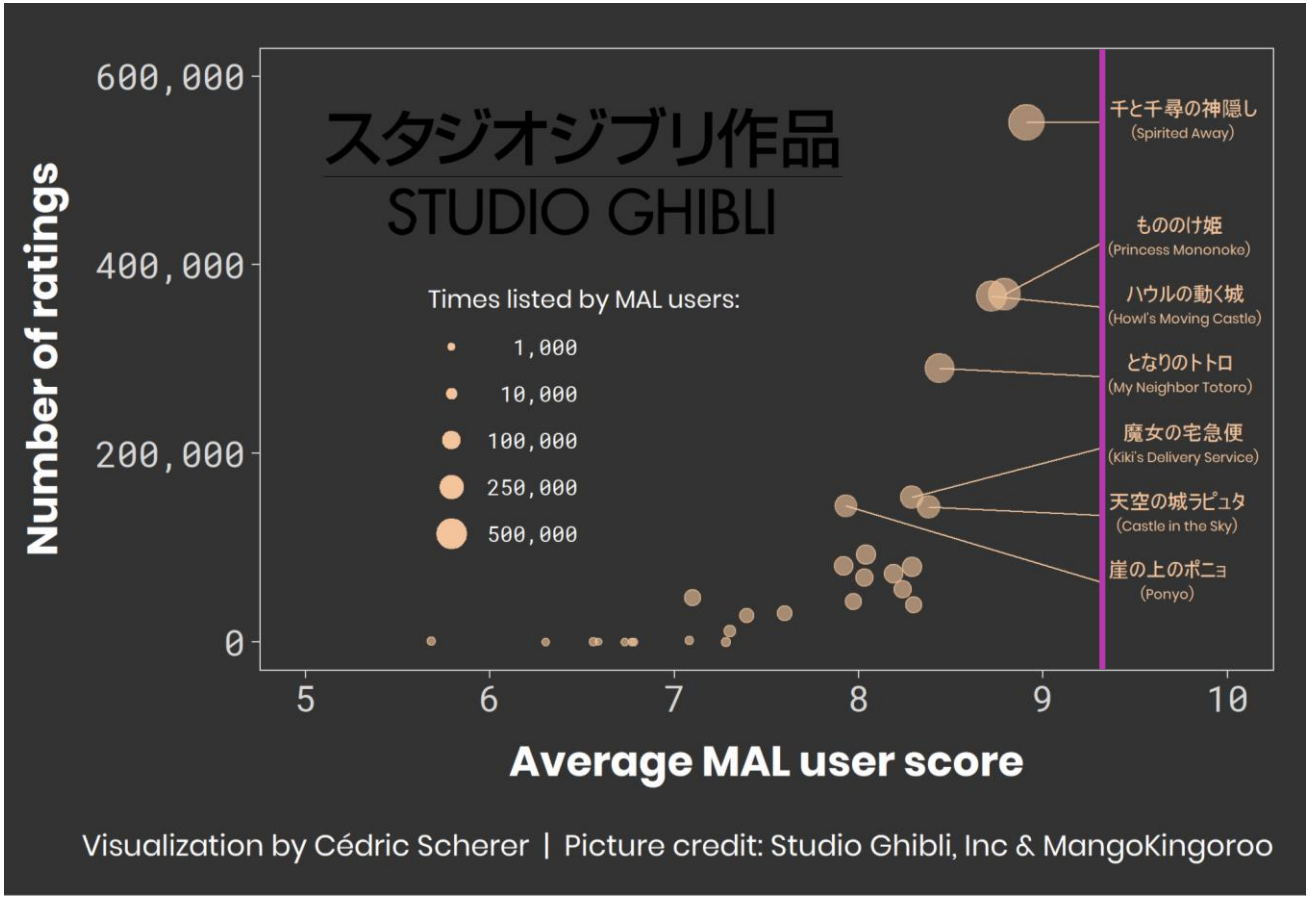




My First Contribution to #TidyTuesday!



My Contribution to #TidyTuesday 2019/17



My Contribution to #TidyTuesday 2019/17

```
xlim = c(9.25, NA)
```

The Emperors of Rome

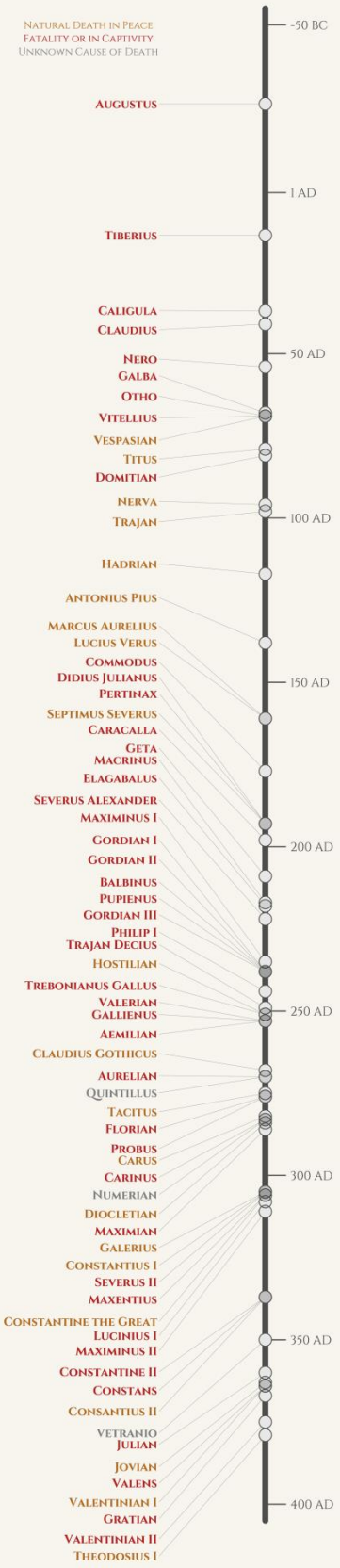
Timeline of roman emperors, start of each reign and their cause of death.
The darker the circles, the more emperors were reigning during this period.

My Contribution to #TidyTuesday 2019/33

cedricscherer.com @CedScherer @z3tt @cedscherer

The Emperors of Rome

Timeline of Roman emperors, start of each reign and their cause of death.
The darker the circles, the more emperors were reigning during this period.



Visualization by Cédric Scherer | Data: Wikipedia

My Contribution to #TidyTuesday 2019/33

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Kamil Slowikowski
slowkow

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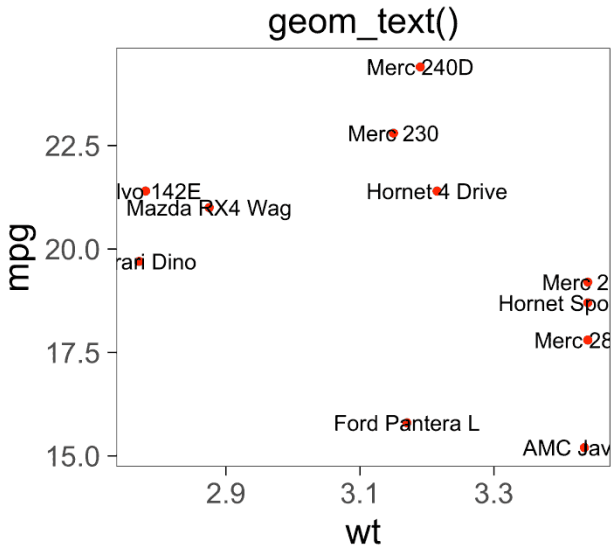
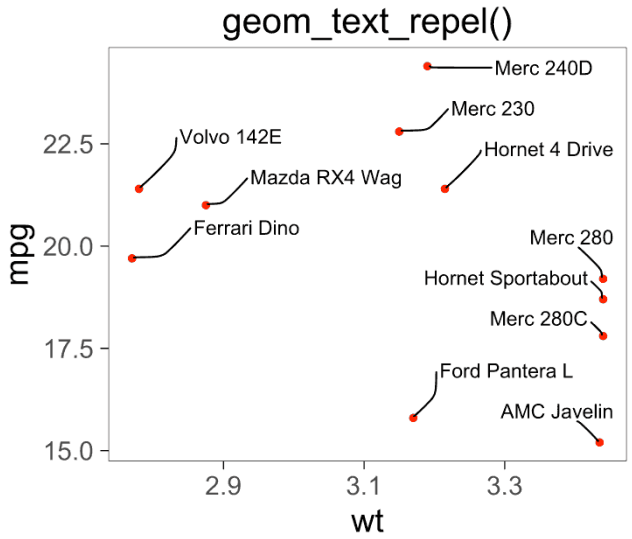
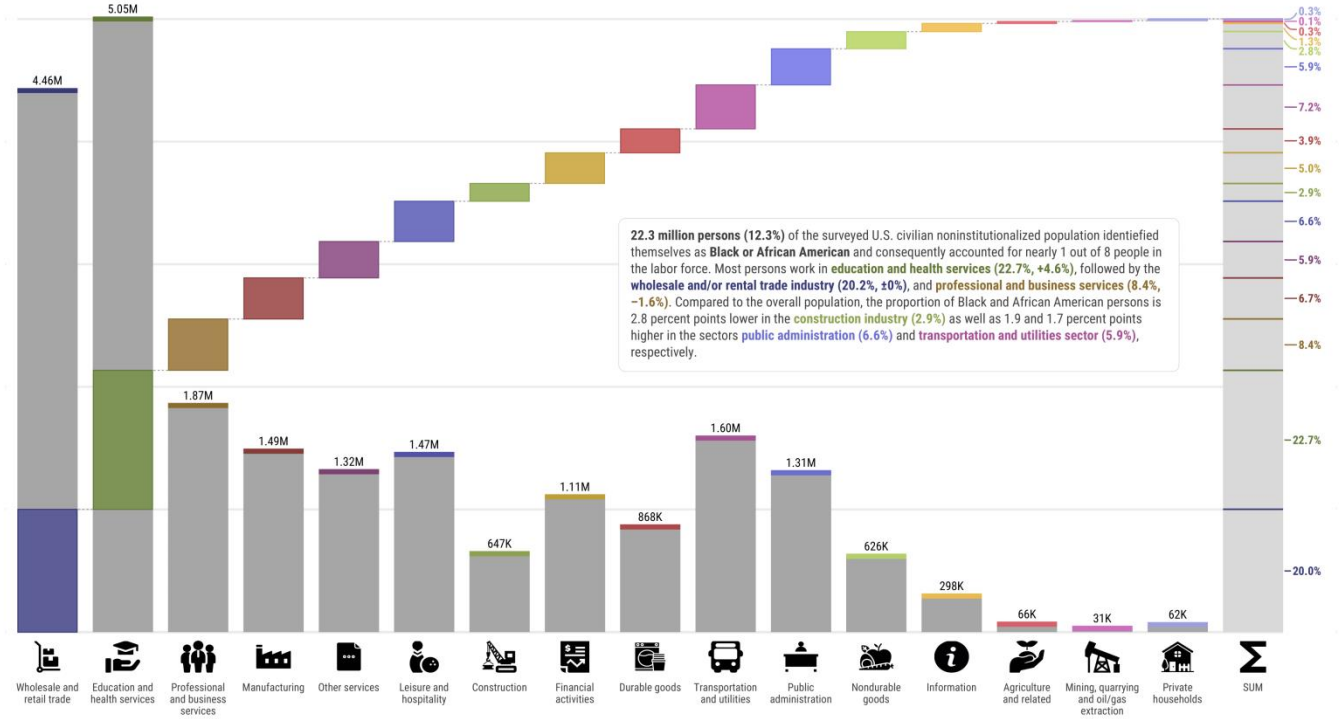




Employed Black and African American Persons in the United States of America by Industry (2020)

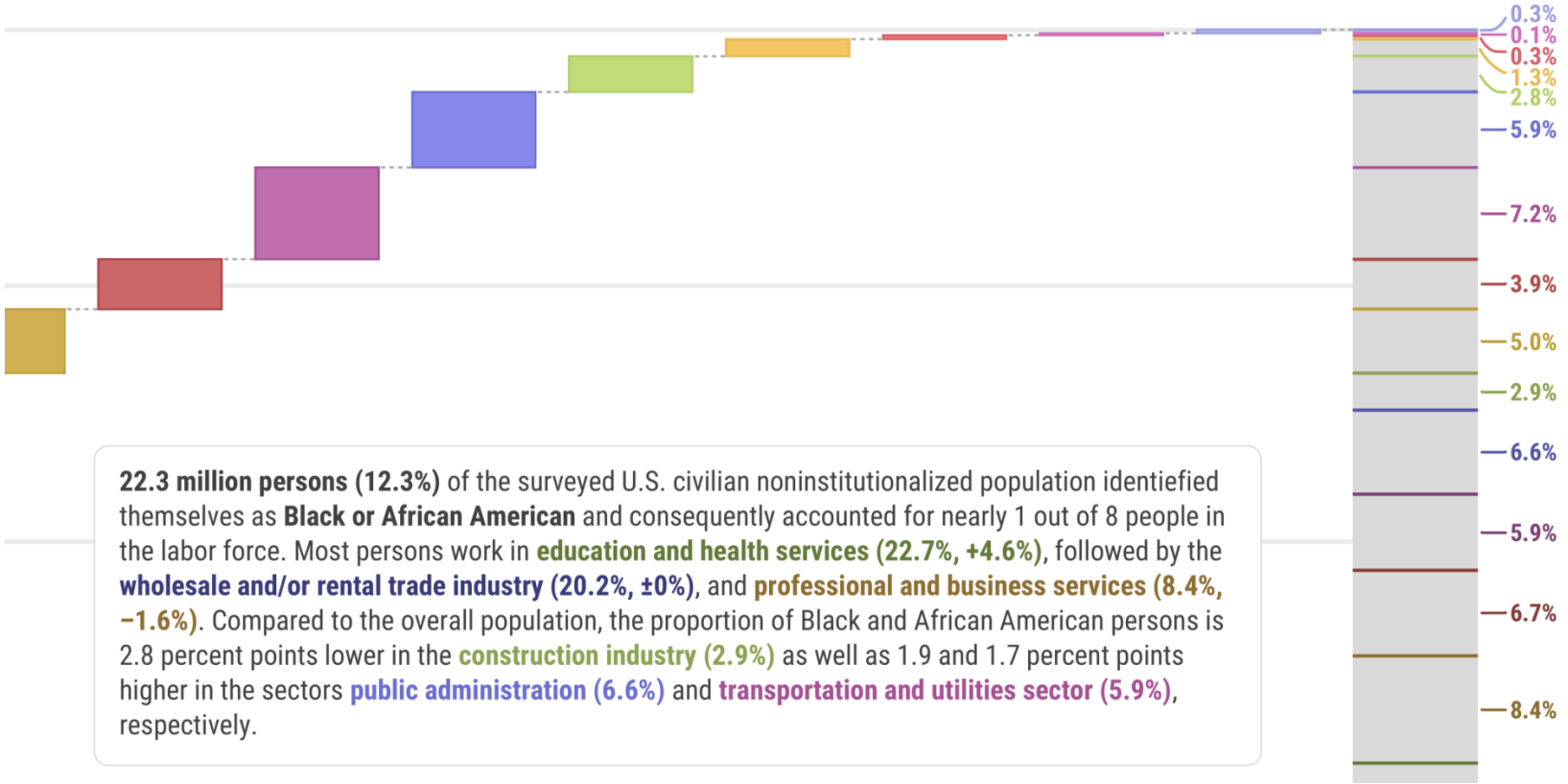
The **Current Population Survey (CPS)** is a monthly survey of households conducted by the **U.S. Bureau of Census for the Bureau of Labor Statistics**. It provides a comprehensive body of data on the labor force, employment, unemployment, persons not in the labor force, hours of work, earnings, and other demographic and labor force characteristics. The following visualizations show the overall number (grey bars) and distribution (colored bars) per industry in 2020. The industries are sorted by the number of employed persons overall.



Visualization: Cédric Scherer • Data: Labor Force Statistics from the Current Population Survey (2020), U.S. Bureau of Labor Statistics (BLS)

My Contribution to #TidyTuesday 2021/09

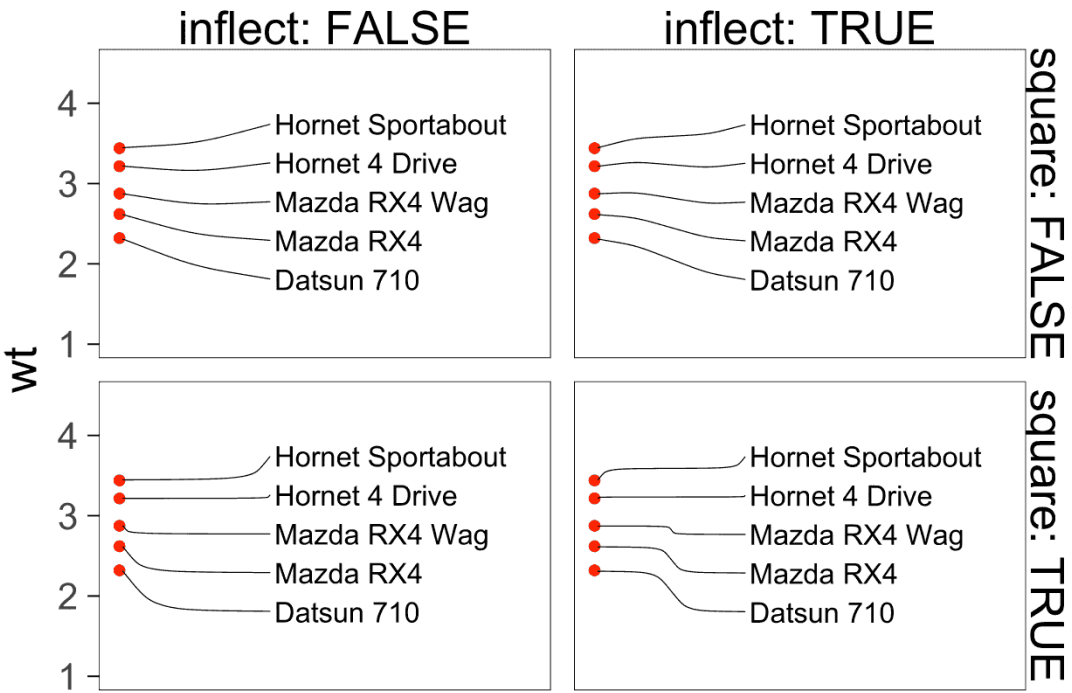
cedricscherer.com @CedScherer @z3tt @cedscherer

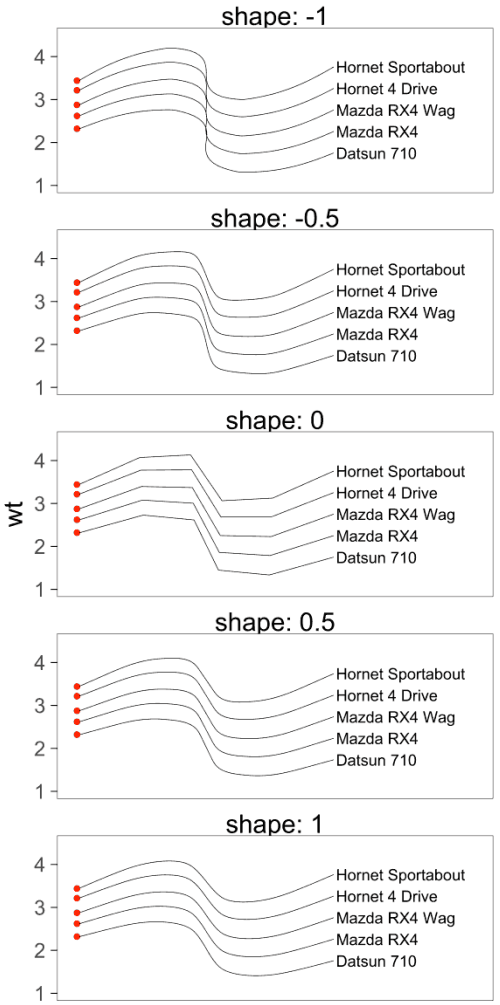


22.3 million persons (12.3%) of the surveyed U.S. civilian noninstitutionalized population identiefied themselves as **Black or African American** and consequently accounted for nearly 1 out of 8 people in the labor force. Most persons work in **education and health services (22.7%, +4.6%)**, followed by the **wholesale and/or rental trade industry (20.2%, ±0%)**, and **professional and business services (8.4%, −1.6%)**. Compared to the overall population, the proportion of Black and African American persons is 2.8 percent points lower in the **construction industry (2.9%)** as well as 1.9 and 1.7 percent points higher in the sectors **public administration (6.6%)** and **transportation and utilities sector (5.9%)**, respectively.

My Contribution to #TidyTuesday 2021/09

cedricscherer.com @CedScherer @z3tt @cedscherer

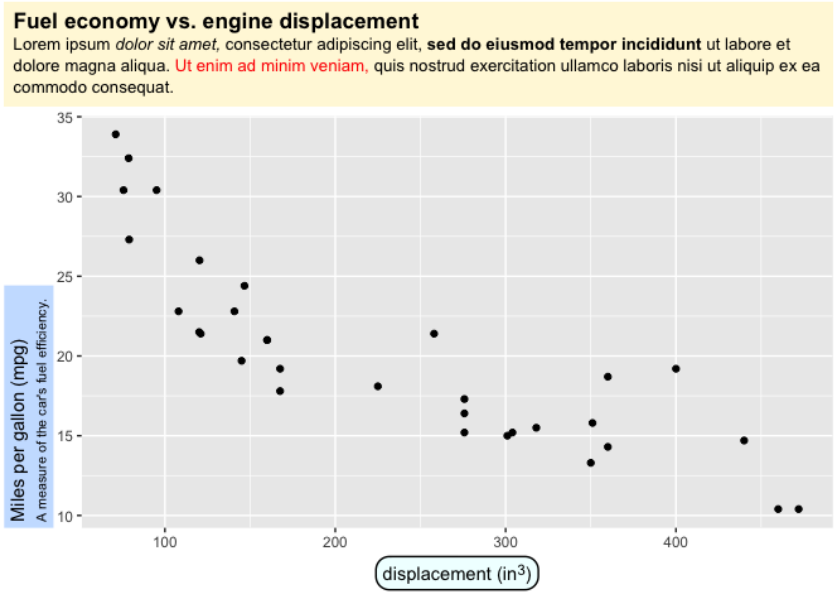

inflect: FALSE
inflect: TRUE
square: FALSE
square: TRUE
wt
4
3
2
1
Hornet Sportabout
Hornet 4 Drive
Mazda RX4 Wag
Mazda RX4
Datsun 710

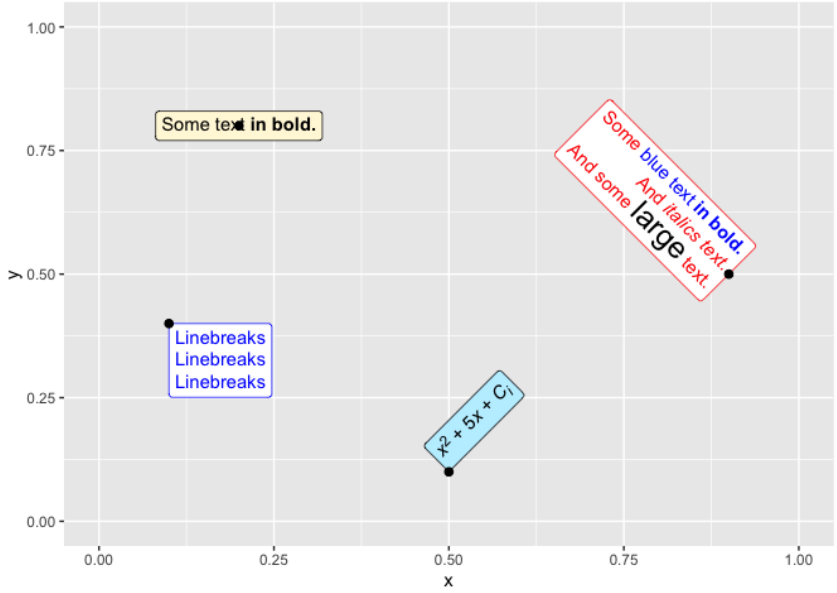

shape: -1
shape: -0.5
shape: 0
shape: 0.5
shape: 1
wt
4
3
2
1
Hornet Sportabout
Hornet 4 Drive
Mazda RX4 Wag
Mazda RX4
Datsun 710

{ggtext}

Improved Text Rendering Support

wilkelab.org/ggtext


Fuel economy vs. engine displacement
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.
Miles per gallon (mpg)
A measure of the car's fuel efficiency.
displacement (in3)
35
30
25
20
15
10
100
200
300
400

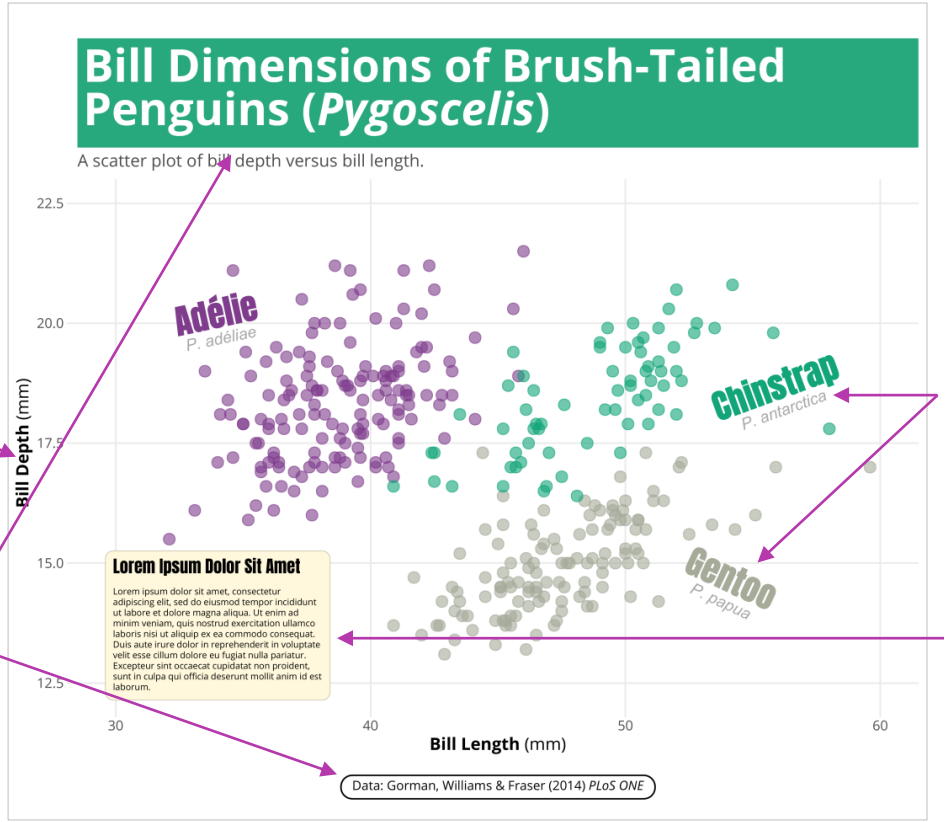

Some text in bold.
Some blue text in bold.
And italics text.
And some large text.
Linebreaks
Linebreaks
Linebreaks
x2 + 5x + C
y
x
1.00
0.75
0.50
0.25
0.00
0.00
0.25
0.50
0.75
1.00

THEME ELEMENTS

`element_markdown()`

`element_textbox()` and `element_textbox_simple()`

➜ includes word wrapping

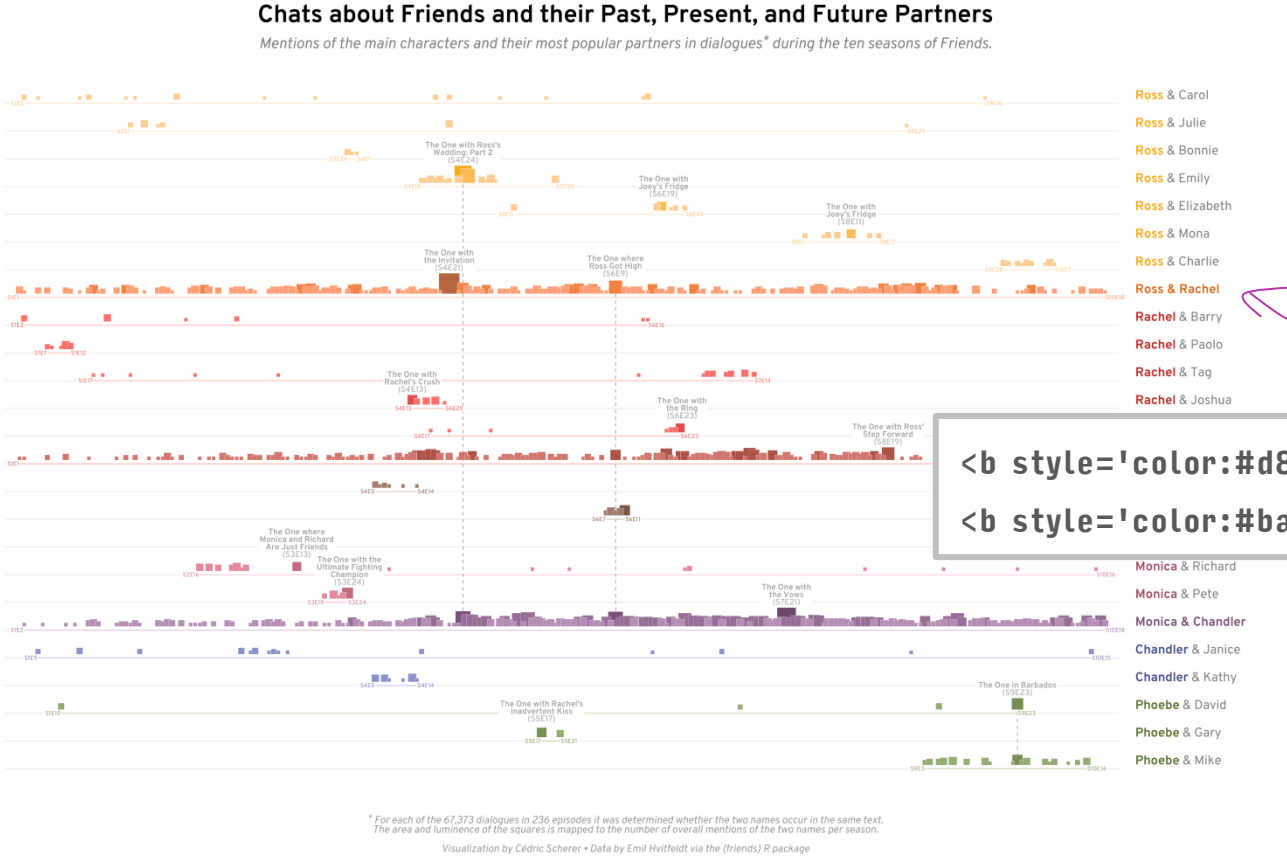


GEOMETRIES

`geom_richtext()`

`geom_textbox()`

➜ includes word wrapping



Font Color
Font Face

```
<b style='color:#d86b1d;'>Ross & Rachel</b>
<b style='color:#ba2a22;'>Rachel</b> & Barry
```

Contribution to #TidyTuesday 2020/37

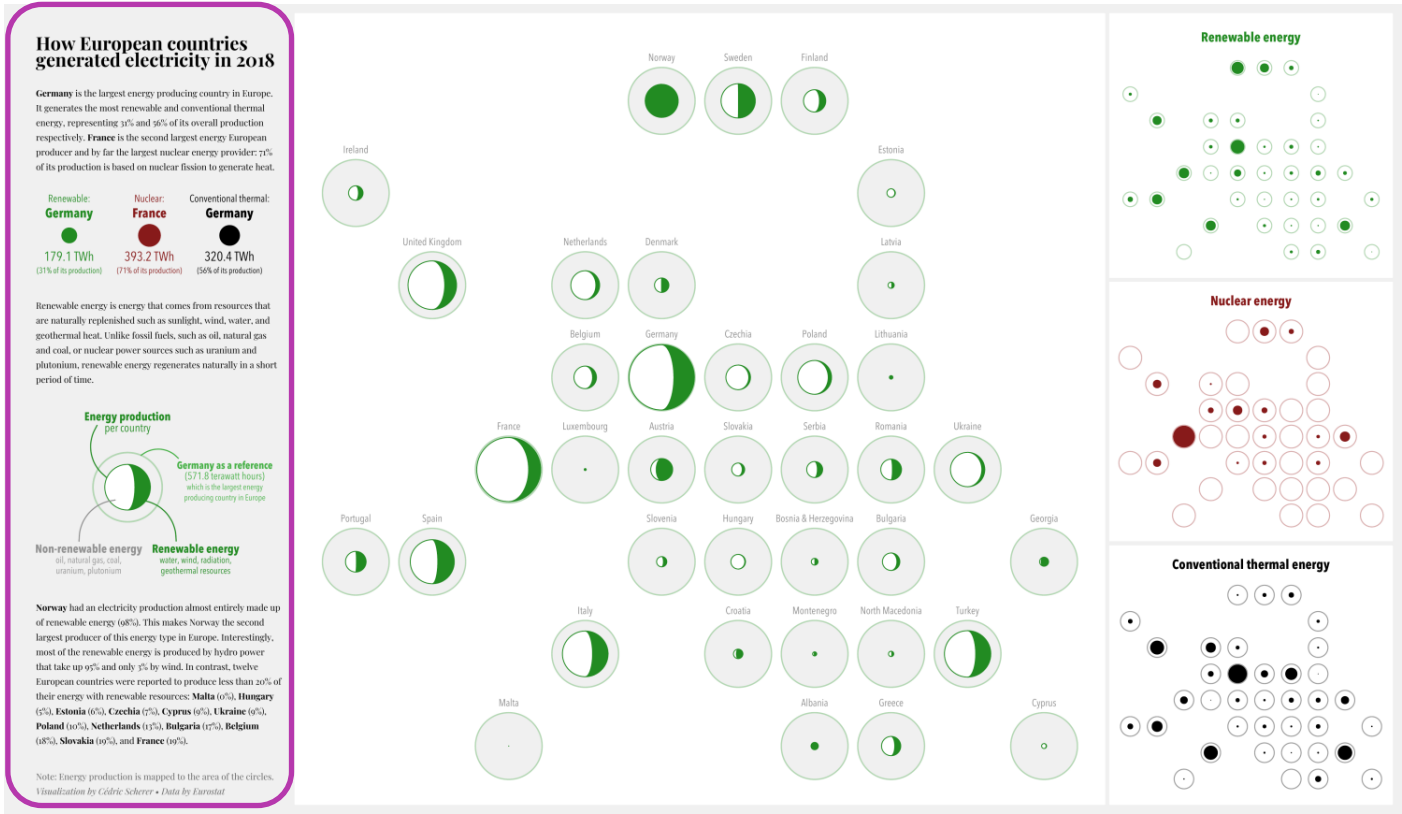
cedricscherer.com @CedScherer @z3tt @cedscherer

key	color	partners
Ross	#f6ab18	Ross & Carol
Chandler	#48508c	Chandler & Janice
Ross & Rachel	#d86b1d	Ross & Rachel

```
ggplot(friends, aes(x = episode, y = partners) +
  … +
  theme(axis.text.y = element_markdown())
```

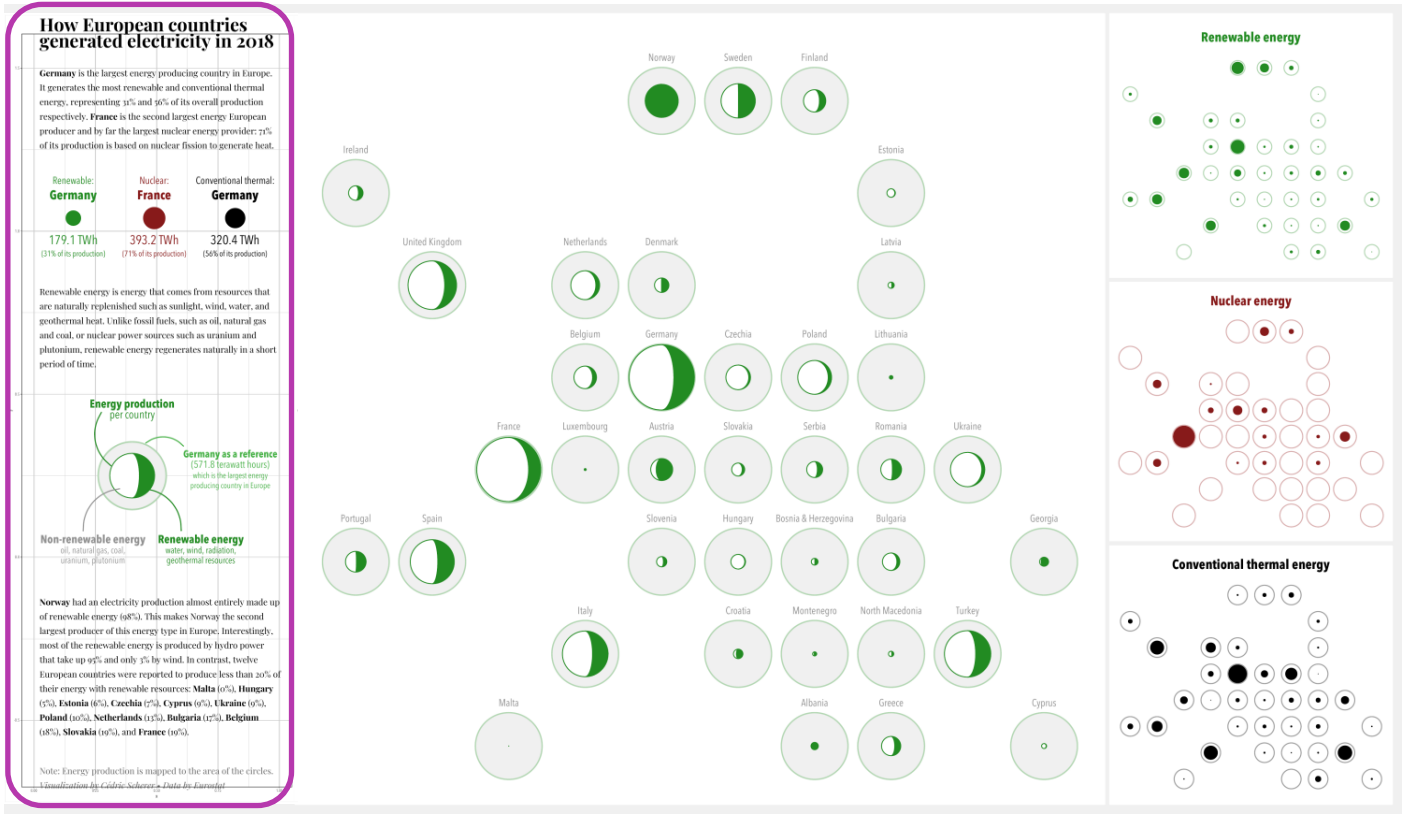
Ross & Carol
Ross & Julie
Ross & Bonnie
Ross & Emily
Ross & Elizabeth
Ross & Mona
Ross & Charlie
Ross & Rachel
Rachel & Barry
Rachel & Paolo
Rachel & Tag
Rachel & Joshua
Rachel & Paul
Rachel & Joey
Joey & Kathy
Joey & Janine
Joey & Charlie
Monica & Richard
Monica & Pete
Monica & Chandler
Chandler & Janice
Chandler & Kathy
Phoebe & David
Phoebe & Gary
Phoebe & Mike

Font Color
Font Face



geom_textbox() +
geom_richtext()

My Contribution to #TidyTuesday 2020/32

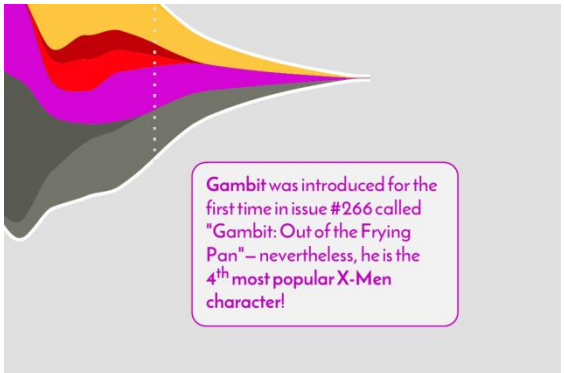


My Contribution to #TidyTuesday 2020/32

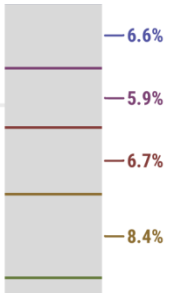
`geom_textbox()` + `geom_richtext()`

AN ECONOMY BUILT ON SLAVERY—A FUTURE BUILD ON FREEDOM?

By 1680, property owners in the south of North America began establishing plantation farms for cash crops like tobacco, cotton, and sugar cane—enterprises that required increasing amounts of labor. To meet the need, wealthy planters became slave traders and imported ever more individuals to the colonies, the vast majority from West Africa. While the "Emancipation Proclamation" was made law as of 1863, slave owners in the South, namely Texas, still maintained slavery until June 19th 1865 when Union soldiers were able to enforce the law abolishing slavery in the region. The graphic below shows the share of black people in slavery, most of them enslaved in the Southern states, and black people living in freedom per decade from 1790 to 1870—the first U.S. census after the Liberation Day known as "Juneteenth".



22.3 million persons (12.3%) of the surveyed U.S. civilian noninstitutionalized population identiefied themselves as **Black or African American** and consequently accounted for nearly 1 out of 8 people in the labor force. Most persons work in **education and health services (22.7%, +4.6%)**, followed by the **wholesale and/or rental trade industry (20.2%, ±0%)**, and **professional and business services (8.4%, −1.6%)**. Compared to the overall population, the proportion of Black and African American persons is 2.8 percent points lower in the **construction industry (2.9%)** as well as 1.9 and 1.7 percent points higher in the sectors **public administration (6.6%)** and **transportation and utilities sector (5.9%)**, respectively.

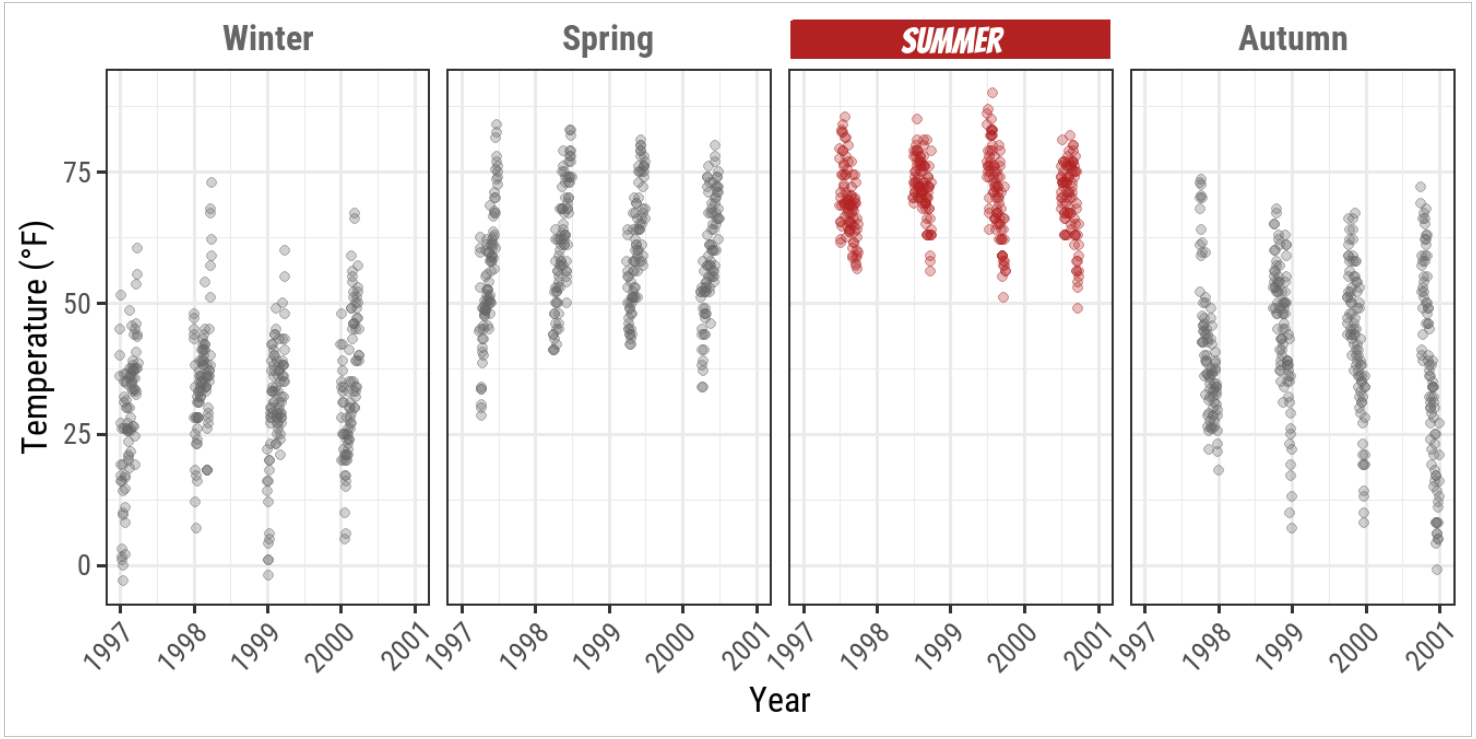


Food Carbon Footprint Index 2018

Global comparison of different diets in terms of **Average Consumption** (kg/person/year) of both animal and non-animal products as well as **Carbon Emissions** (kg CO_2/person/year) per continent and country. Font size and color intensity indicate each country's estimate with **countries printed in bold** belonging to the upper 50% of consumers and CO_2 emissioners, respectively.

cedricscherer.com @CedScherer @z3tt @cedscherer

custom element_textbox_highlight()



- stackoverflow.com/questions/60332202/conditionally-fill-ggtext-text-boxes-in-facet-wrap
- cedricscherer.com/2019/08/05/a-ggplot2-tutorial-for-beautiful-plotting-in-r/#panels

Multi-Panel Figures

{geofacet}

Create Tile Grid Maps

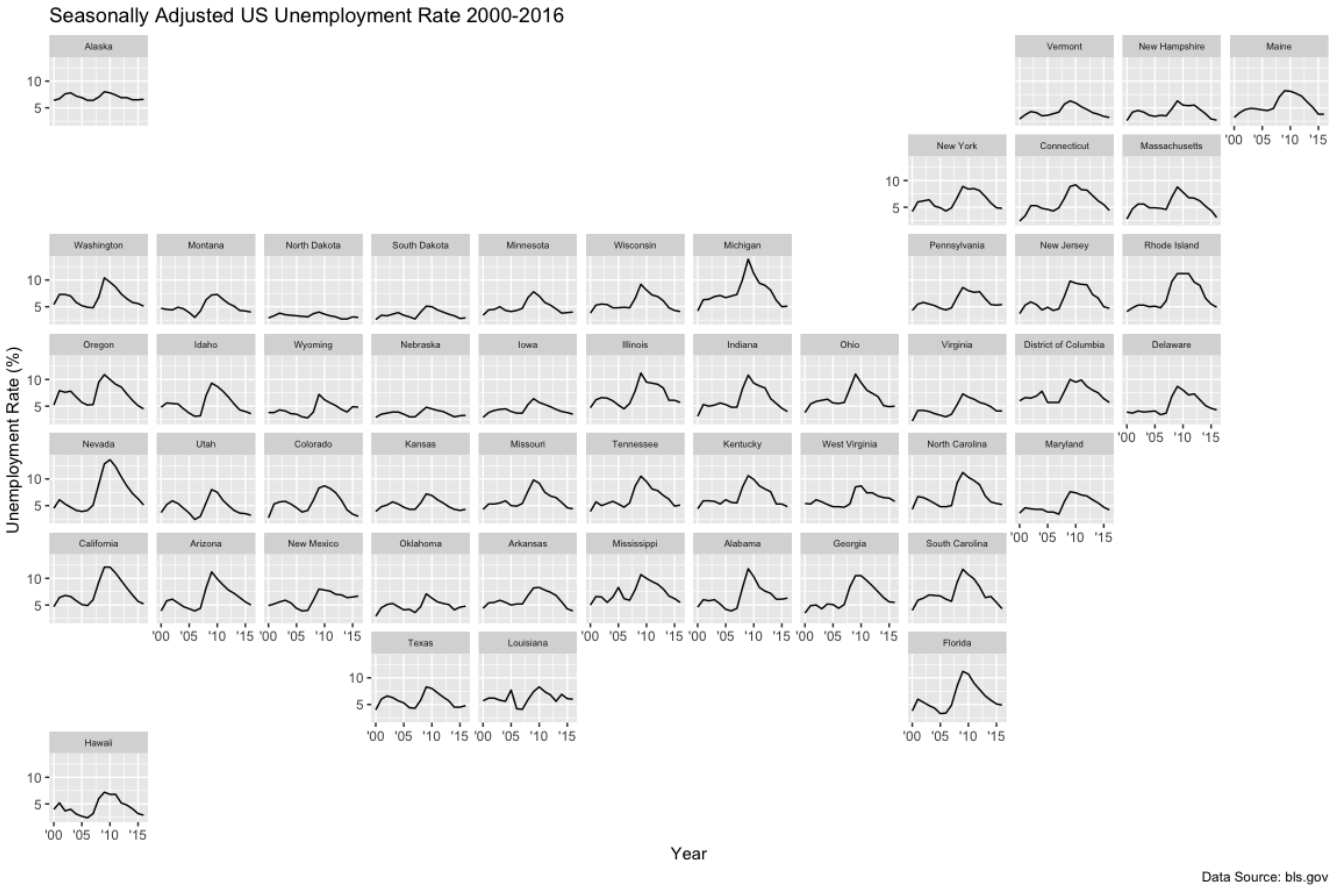
github.com/davidsjoberg/ggbump

Ryan Hafen
hafen

Follow

246 followers · 1 following · ☆ 59

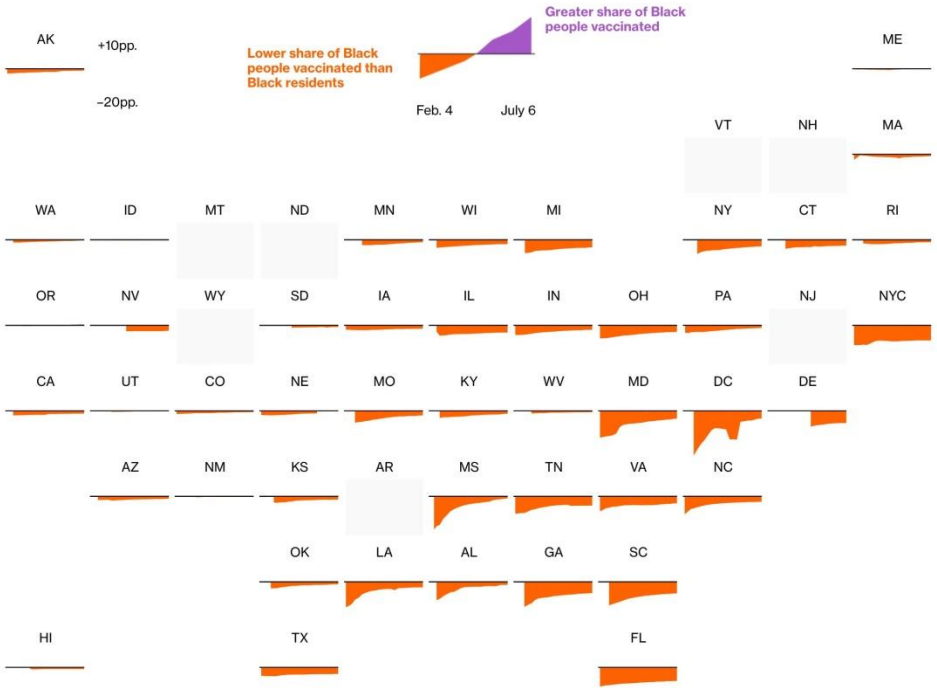
WA, USA
ryanhafen.com



Which States Are Closing the Racial Vaccine Gap, and Which Aren't

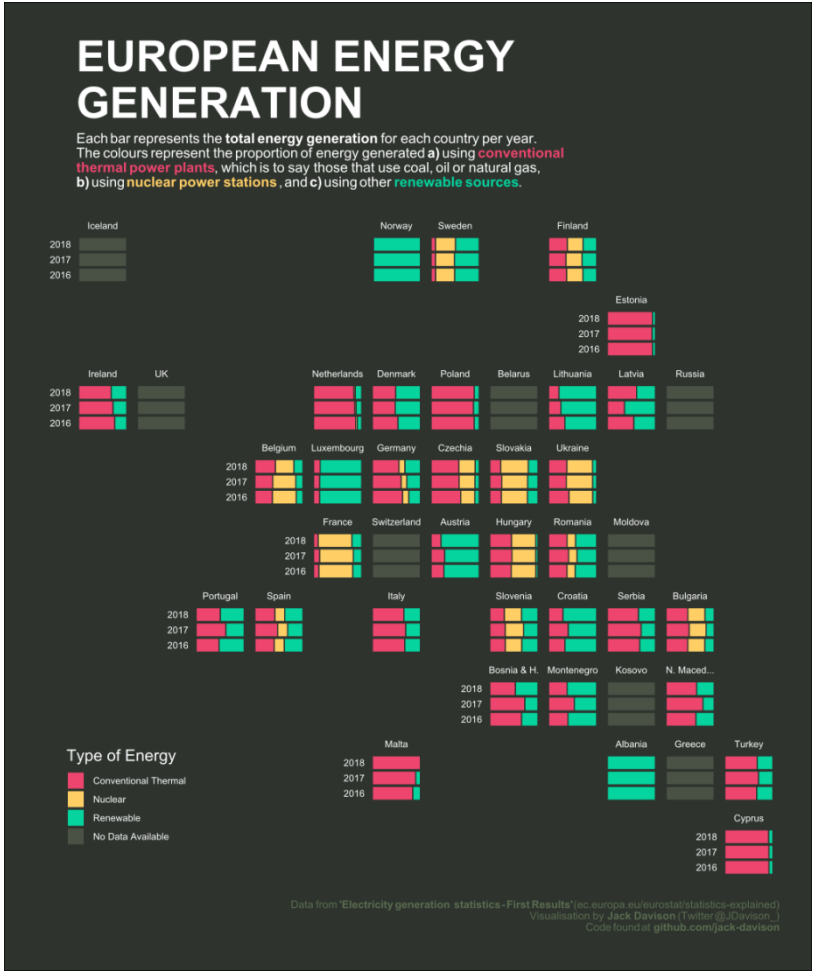
Southern states like Mississippi have improved their Black vaccination rates

Black | White | Asian | Hispanic



Note: Pennsylvania data excludes Philadelphia. These charts don't include all available races, so in rare cases, no race or ethnicity represented will look like it's getting more than its fair share of vaccines. States with fewer than four weeks of data will only show the latest vaccination gap on hover. Due to a change in how it's reporting data, Nebraska's data is as of May 24. Minnesota data is unchanged as of June 28.

Bloomberg Graphic from today



Jack Davison, #TidyTuesday 2020/32

My Contribution to #TidyTuesday 2020/21

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{patchwork}

The Composer of ggplots

patchwork.data-imaginist.com

Thomas Lin Pedersen
thomasp85

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Maker of tools focusing on data science and data visualisation

2.4k followers · 2 following · ☆ 21

@rstudio, part of @tidyverse team
Copenhagen
www.data-imaginist.com

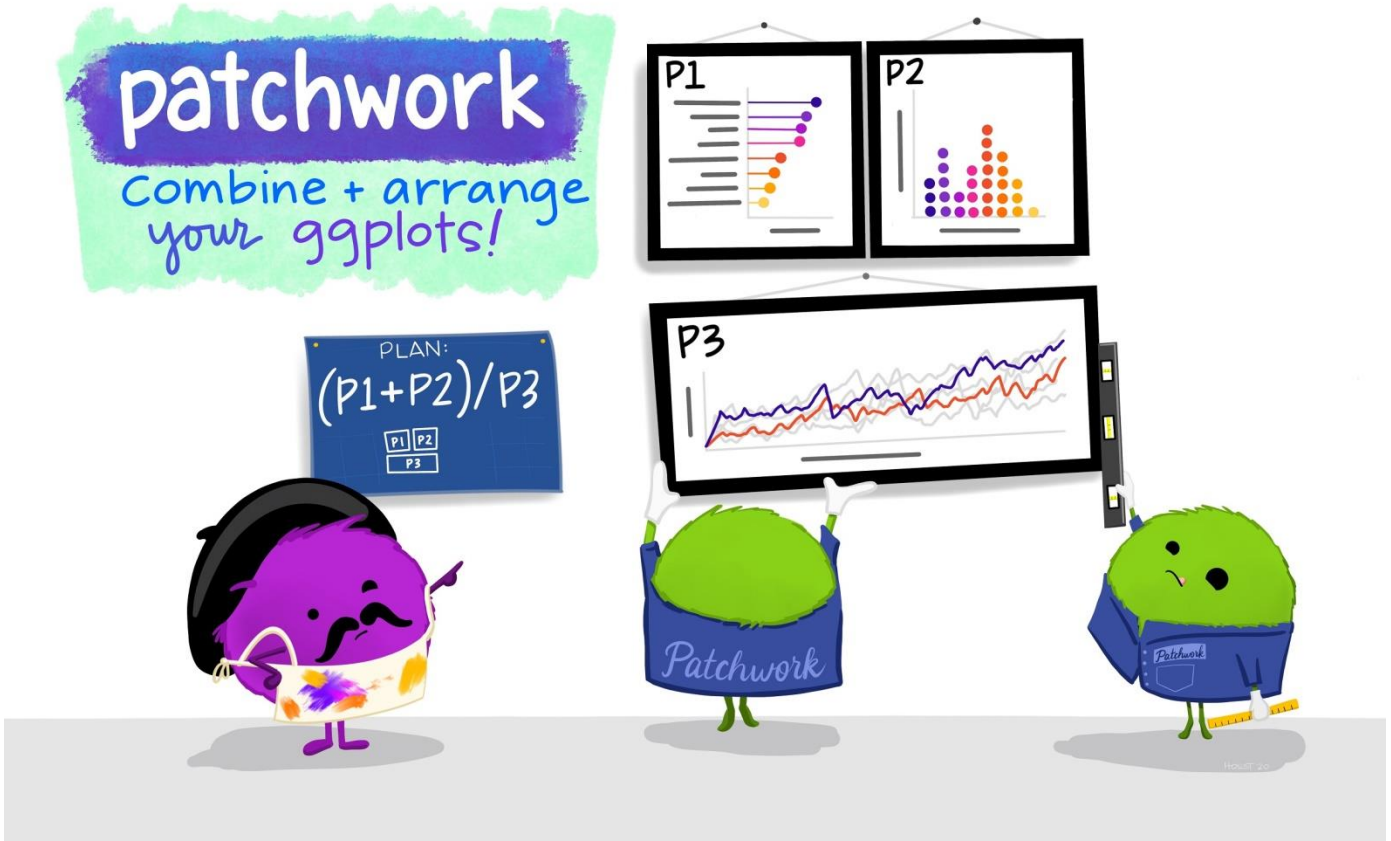
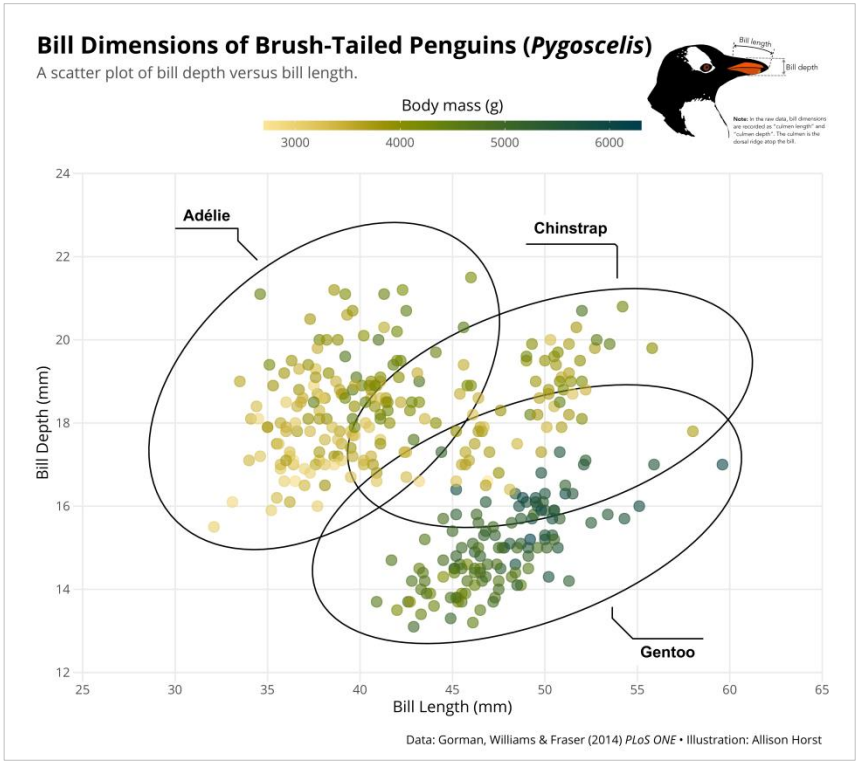
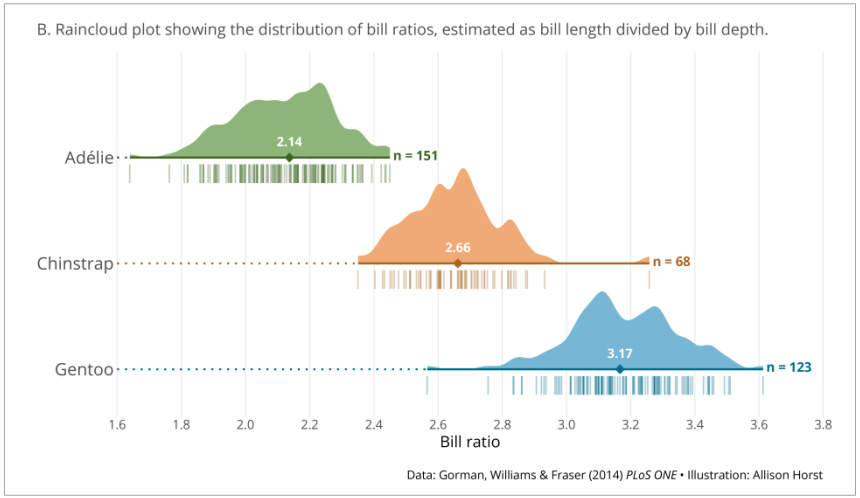


Illustration by Allison Horst

{patchwork} The Composer of ggplots

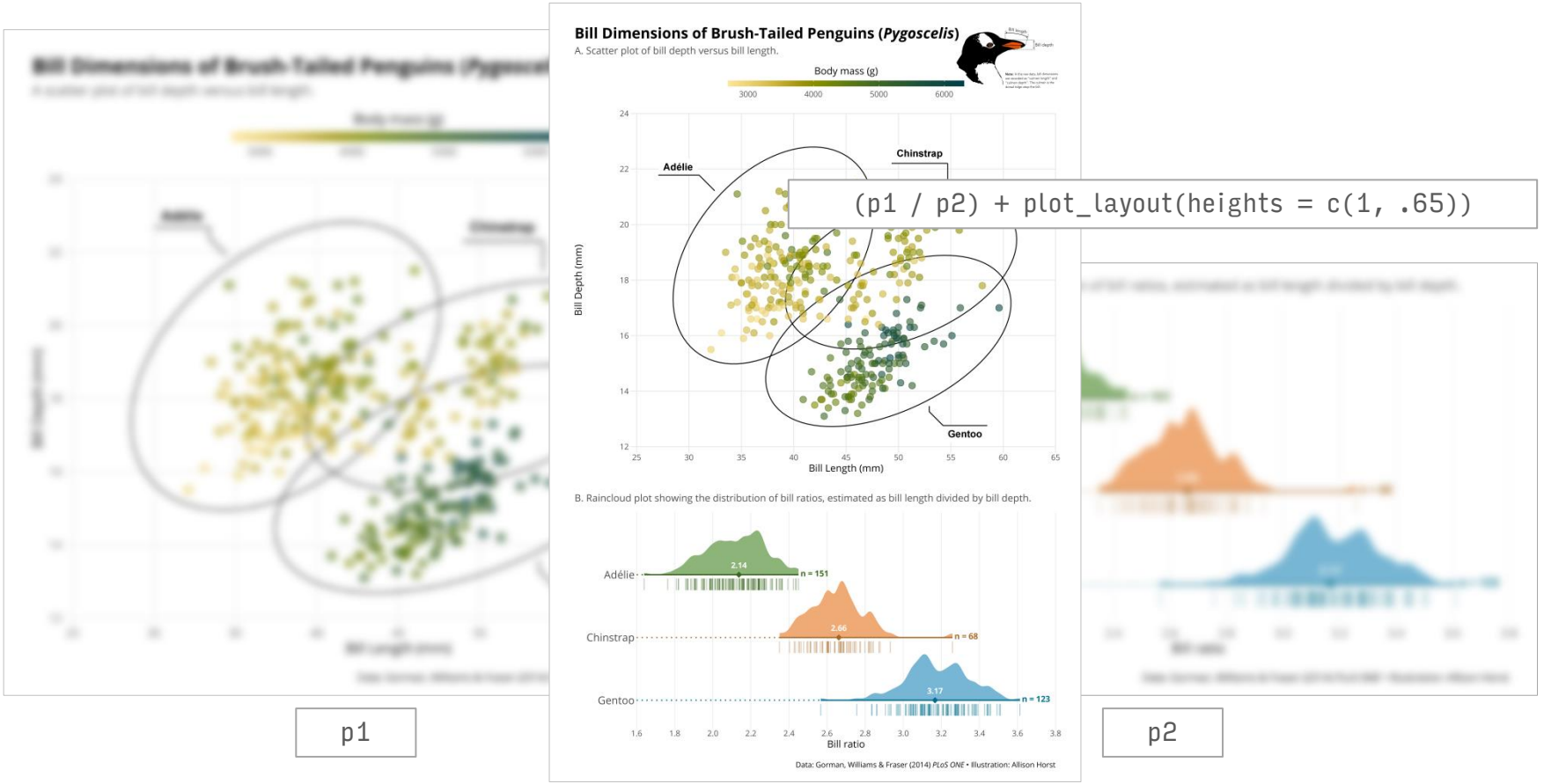


p1



p2

{patchwork} The Composer of ggplots



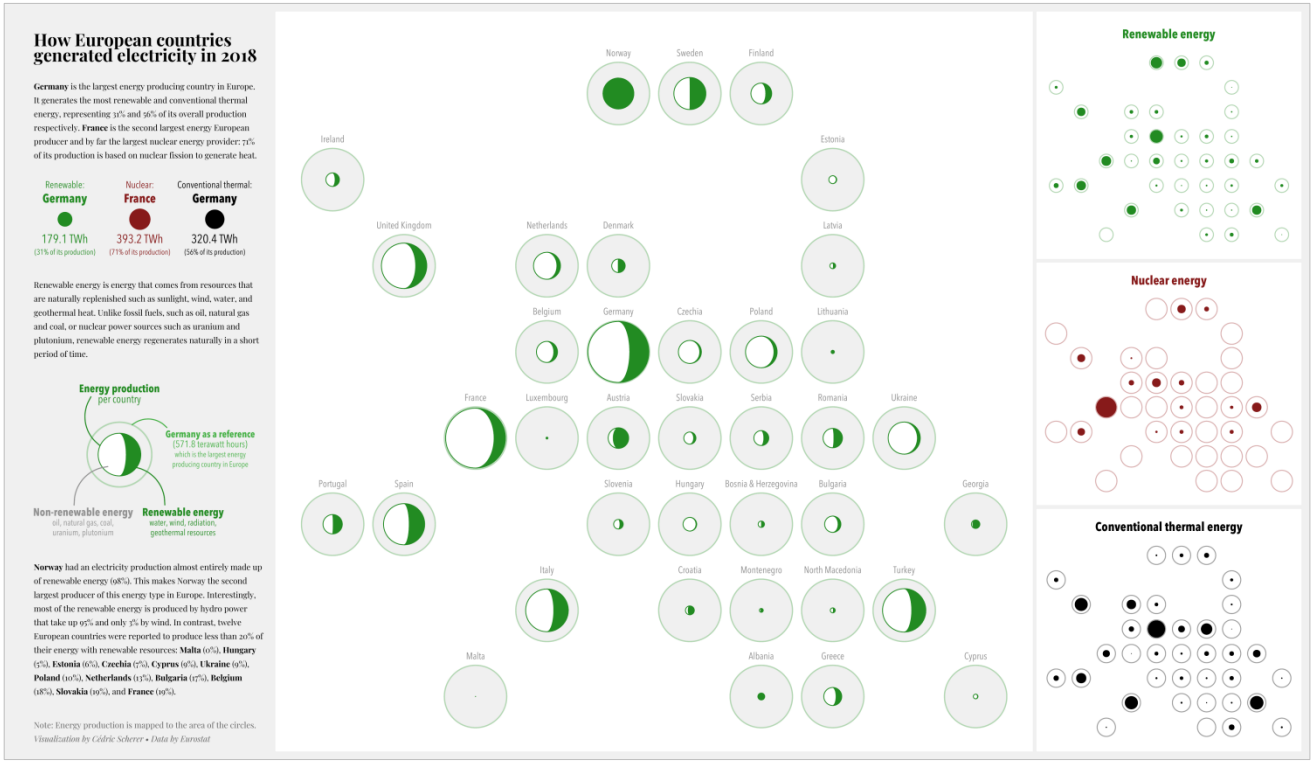

```
(p1 / p2) + plot_layout(heights = c(1, .65))
```

p1

p2

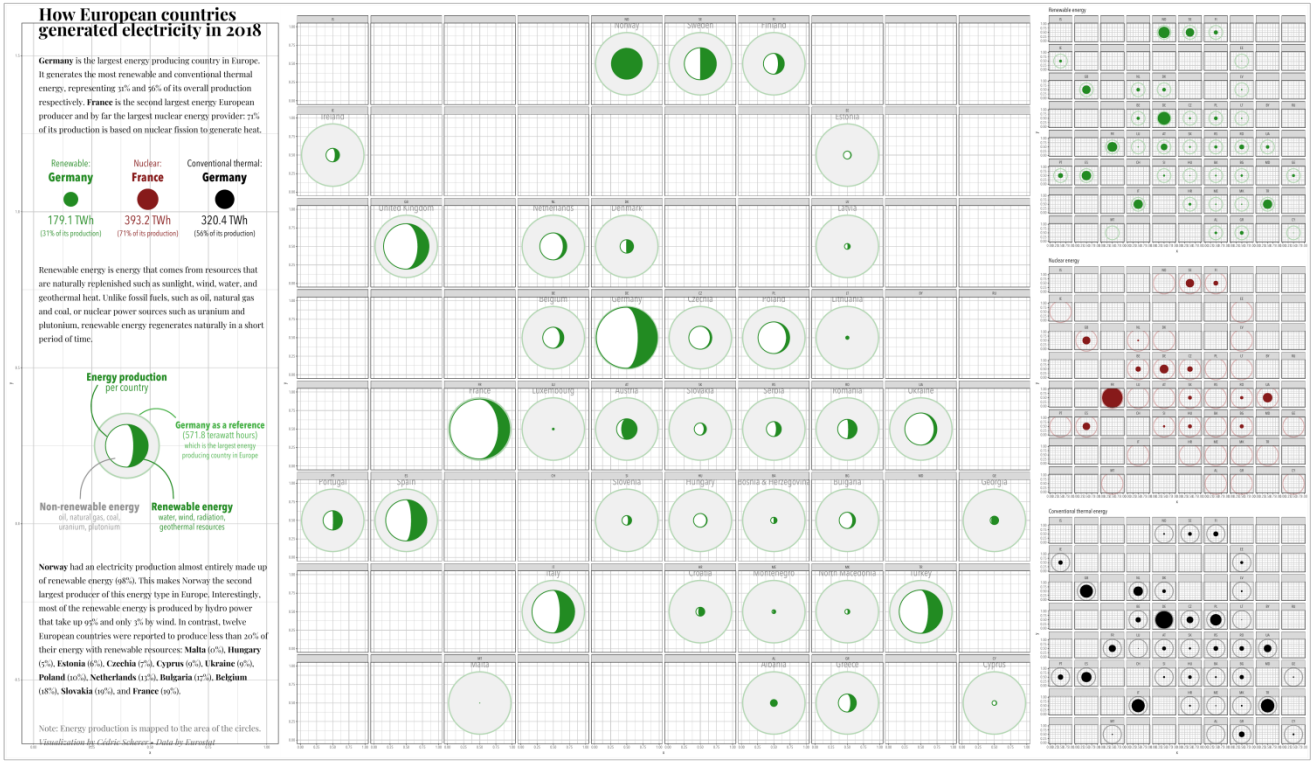
{patchwork} The Composer of ggplots

```
legend | main | (renewable / nuclear / thermal) + plot_layout(widths = c(.35, 1, .35))
```



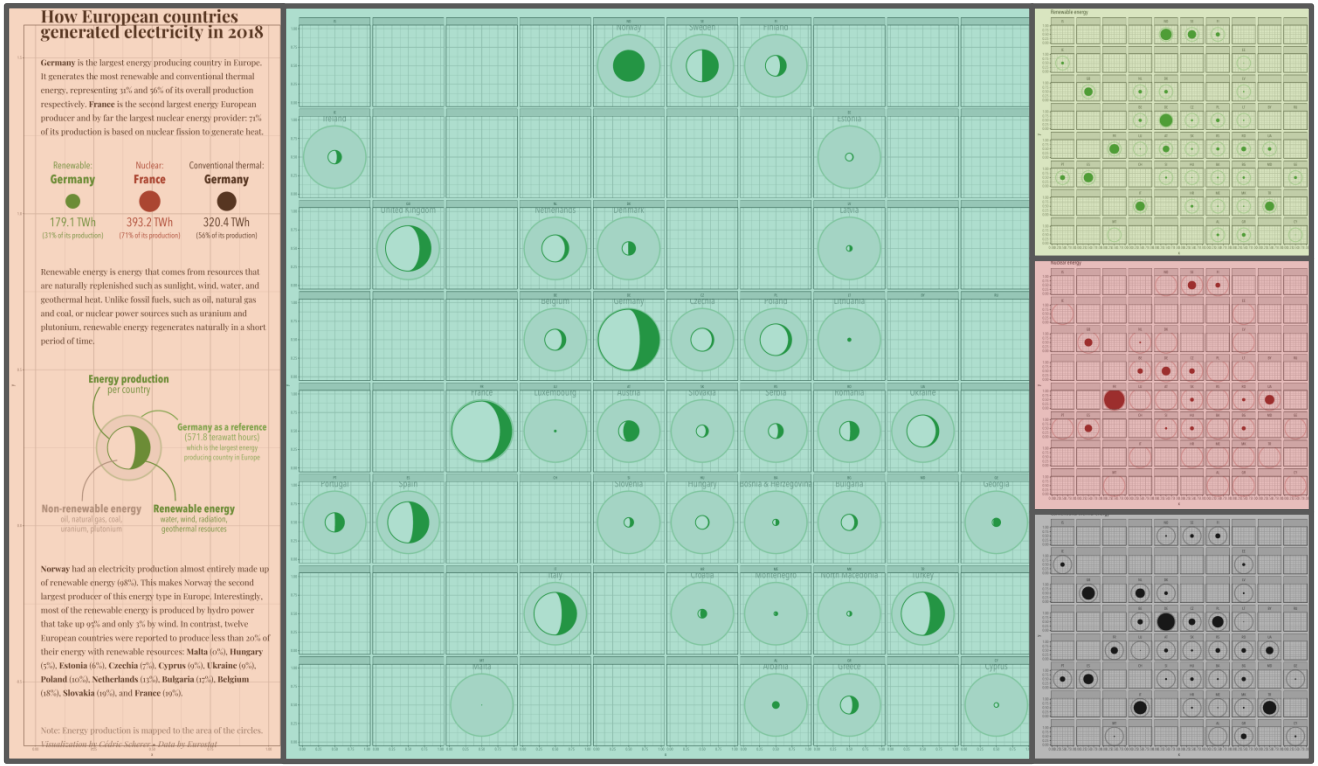
{patchwork} The Composer of ggplots

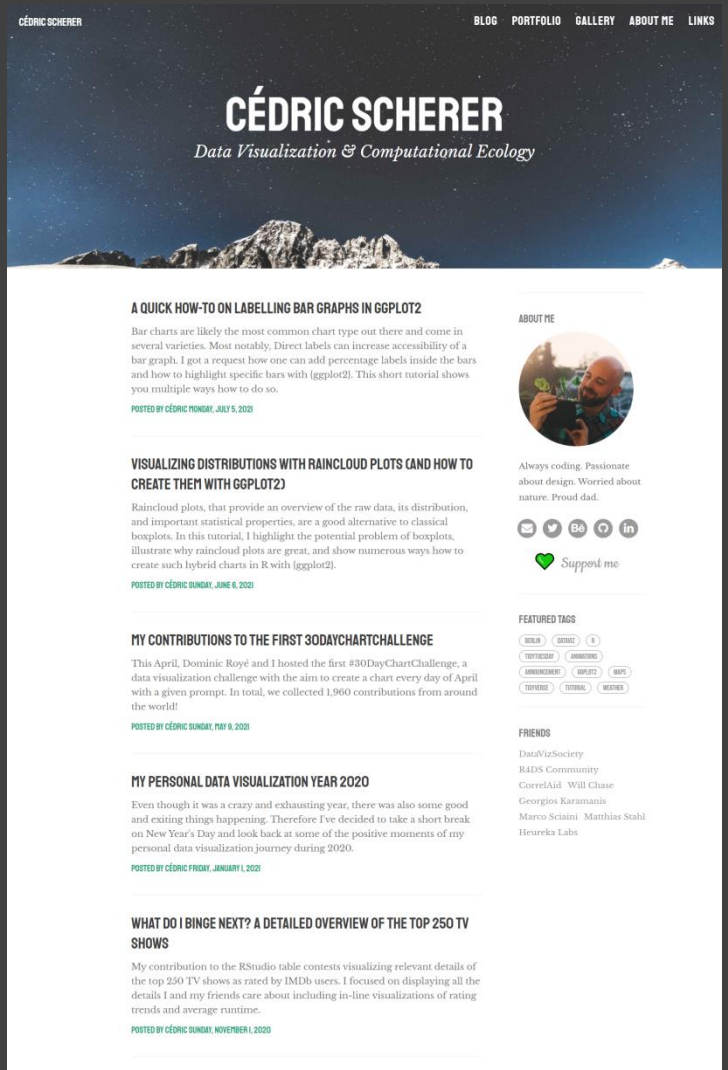
```
legend | main | (renewable / nuclear / thermal) + plot_layout(widths = c(.35, 1, .35))
```

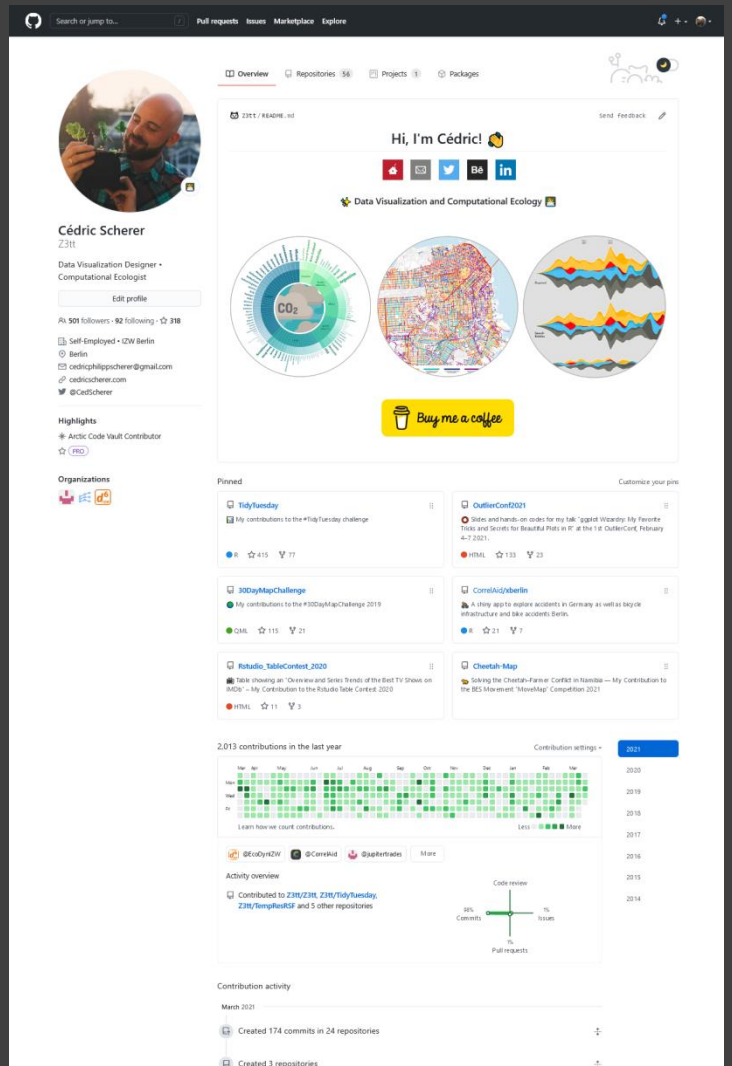


{patchwork} The Composer of ggplots

```
legend | main | (renewable / nuclear / thermal) + plot_layout(widths = c(.35, 1, .35))
```







Thank you!

cedricscherer.com
twitter.com/CedScherer
github.com/z3tt

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DATAVIZ TUTORIAL R TIDYVERSE GGPLOT2

A GGPLOT2 TUTORIAL FOR BEAUTIFUL PLOTTING IN R

POSTED BY CÉDRIC ON MONDAY, AUGUST 5, 2019

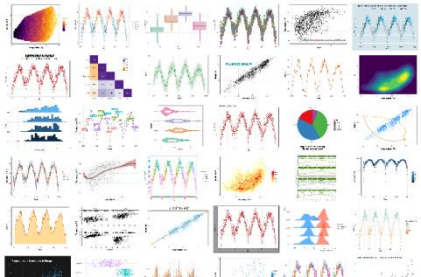
Last update: 2020-12-07

INTRODUCTORY WORDS

I don't care, just show me the content!

Back in 2016, I had to prepare my PhD introductory talk and I started using `{ggplot2}` to visualize my data. I never liked the syntax and style of base plots in R, so I was quickly in love with ggplot. Especially useful was its faceting utility. But because I was short on time, I plotted these figures by trial and error and with the help of lots of googling. The resource I came always back to was a blog entry called Beautiful plotting in R: A ggplot2 cheatsheet by Zev Ross, updated last in January 2016. After giving the talk which contained some decent plots thanks to the blog post, I decided to go through this tutorial step-by-step. I learned so much from it and directly started modifying the codes and over the time I added additional code snippets, chart types and resources.

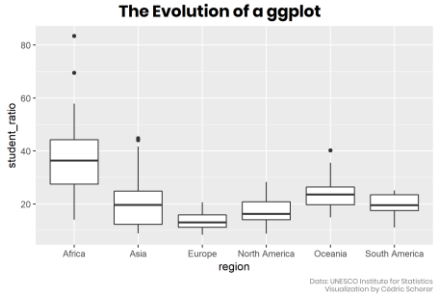
Since the blog entry by Zev Ross was not updated for some years and step by step this became a unique version of a tutorial, I decided to host the updated version on my GitHub. Now it finds its proper place on this homepage! (Plus I added a ton of other updates—just to name a few: The fantastic `{patchwork}`, `{ggtext}` and `{ggforce}` packages. How to deal with custom fonts and colors. A collection of R packages tailored to create interactive charts. And several other chart types including pie charts because everyone looooves pie charts!)



DATAVIZ TUTORIAL ANIMATIONS GGPLOT EVOLUTION R GGPLOT2 TIDYVERSE TIDYTUESDAY

THE EVOLUTION OF A GGPLOT (EP. I)

POSTED BY CÉDRIC ON FRIDAY, MAY 17, 2019



AIM OF THIS TUTORIAL

In this series of blog posts, I aim to show you how to turn a default ggplot into a plot that visualizes information in an appealing and easily understandable way. The goal of each blog post is to provide a step-by-step tutorial explaining how my visualization have evolved from a typical basic ggplot. All plots are going to be created with 100% `{ggplot2}` and 0% Inkscape.

In the first episode, I transform a basic boxplot into a colorful and self-explanatory combination of a jittered dot strip plot and a lollipop plot. I am going to use data provided by the UNESCO on global student to teacher ratios that was selected as data for the #TidyTuesday challenge 19 of 2019.

Thank you!

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twitter.com/CedScherer

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the END