



CORRELAID

GOOD CAUSES. BETTER EFFECTS.

Data Visualization with R

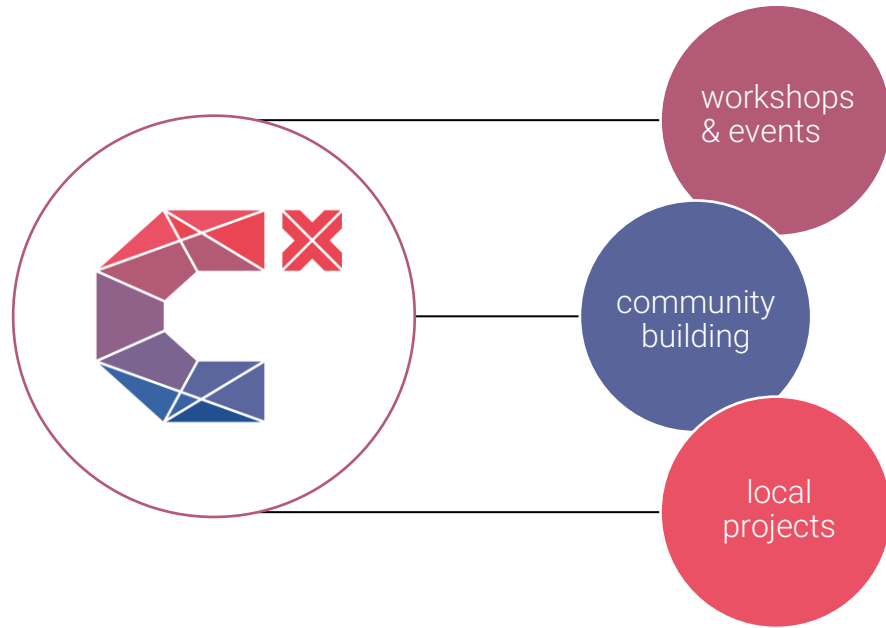
An introduction to ggplot2 and the world of plots

Agenda

- What is CorrelAid?
- What is CorrelAid in Konstanz?
- Data Visualization
 - Why do we need that?
 - Types of plots
 - ggplot2



CorrelAid & CorrelAidXKonstanz



CorrelAid

- network with more than 1900 data scientists and data enthusiasts
- students and working people
- data4good-projects

Local Chapter Konstanz

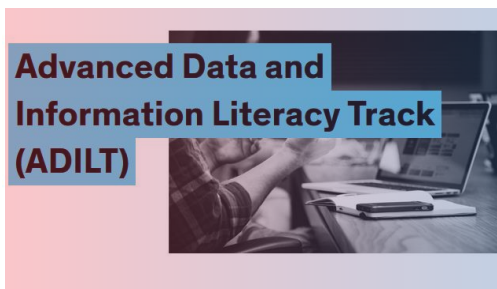
- city of foundation!
- workshops 😊
- hackathons
- local projects with other NPOs etc.

Our Local Chapter



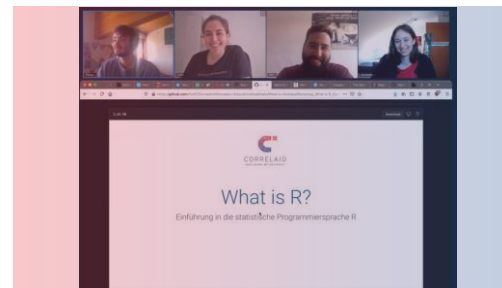
DATA4GOOD PROJECTS

We conduct pro bona data analysis projects for nonprofit organizations like *Stolpersteine* or *SOG*.



LOCAL COOPERATIONS

In cooperation with the city of Konstanz, the ADILT, the SWR, Cyberlago and also the Südkurier, packages are written, lectures held, and hackathons organized.



EDUCATION

So far, workshops on various topics are held regularly in R at university, but we also plan to go to schools!

Data Visualization

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 data © paperkit

60 POINTS

GUATEMALA

△ 59.8 POINTS

The coffee bean with the lowest rating has its origin in Guatemala.



One bean from Nicaragua got a bad rating, too.

△ 61.1 POINTS

HONDURAS

△ 62.2 POINTS

MEXICO

△ 62.3 POINTS

NICARAGUA

△ 61.1 POINTS

70 POINTS

COSTA RICA

△ 71.9 POINTS

UNITED STATES

△ 72.7 POINTS

BRAZIL

△ 72.2 POINTS

TAIWAN

△ 72.7 POINTS

TANZANIA

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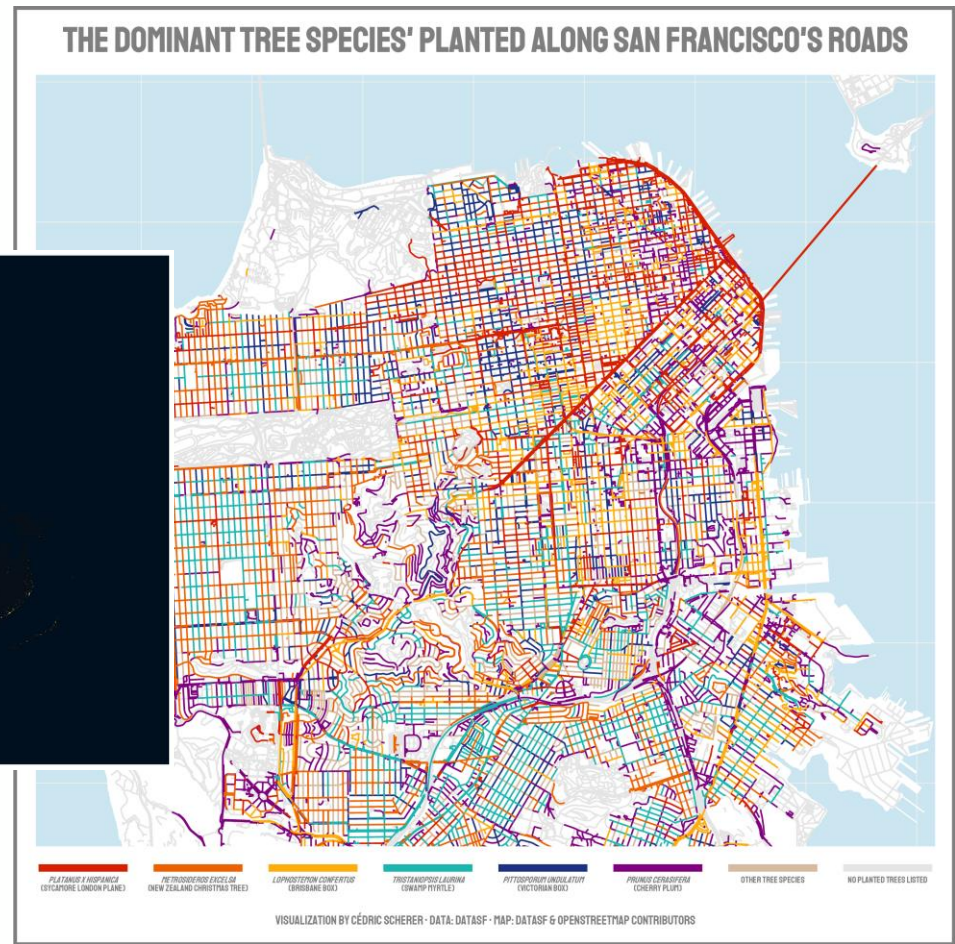
TANZANIA

△ 80.3 POINTS

Data Visualization

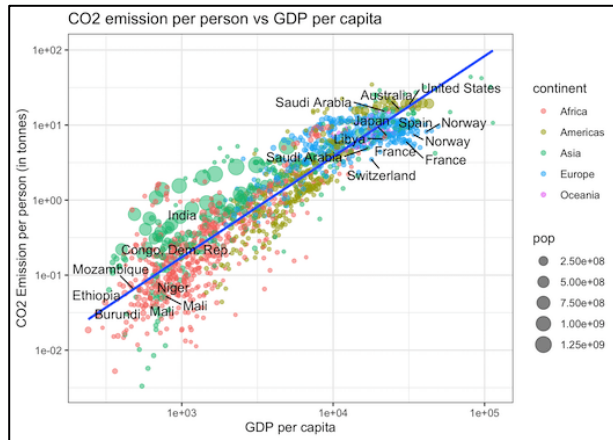


<https://www.cedricscherer.com/top/dataviz/>

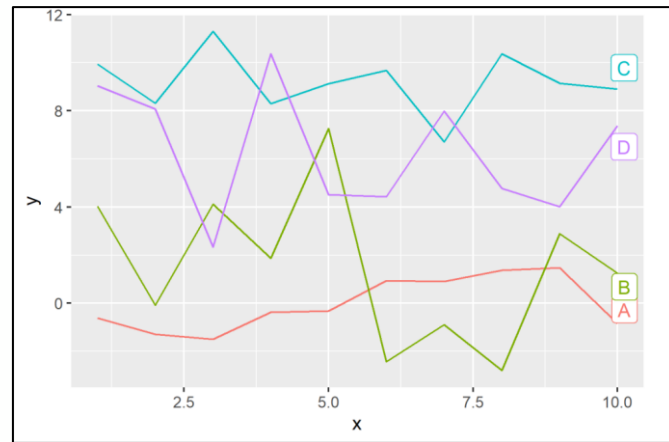
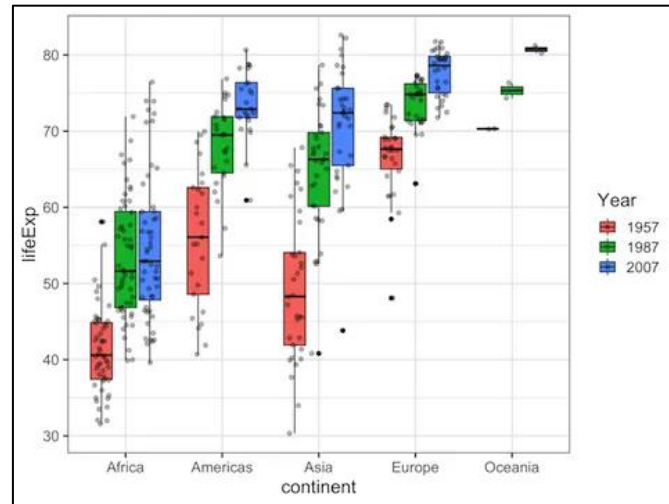
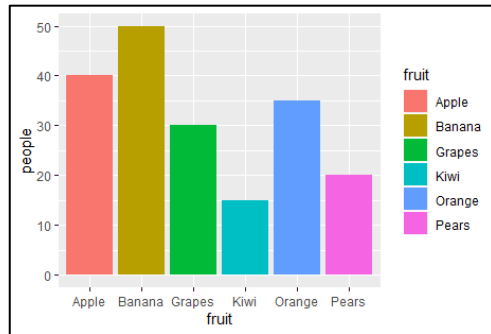


Types of Plots

https://i1.wp.com/cmdlinetips.com/wp-content/uploads/2019/11/scatter_plot_with_ggplot_annotate_with_text.png?resize=525%2C375

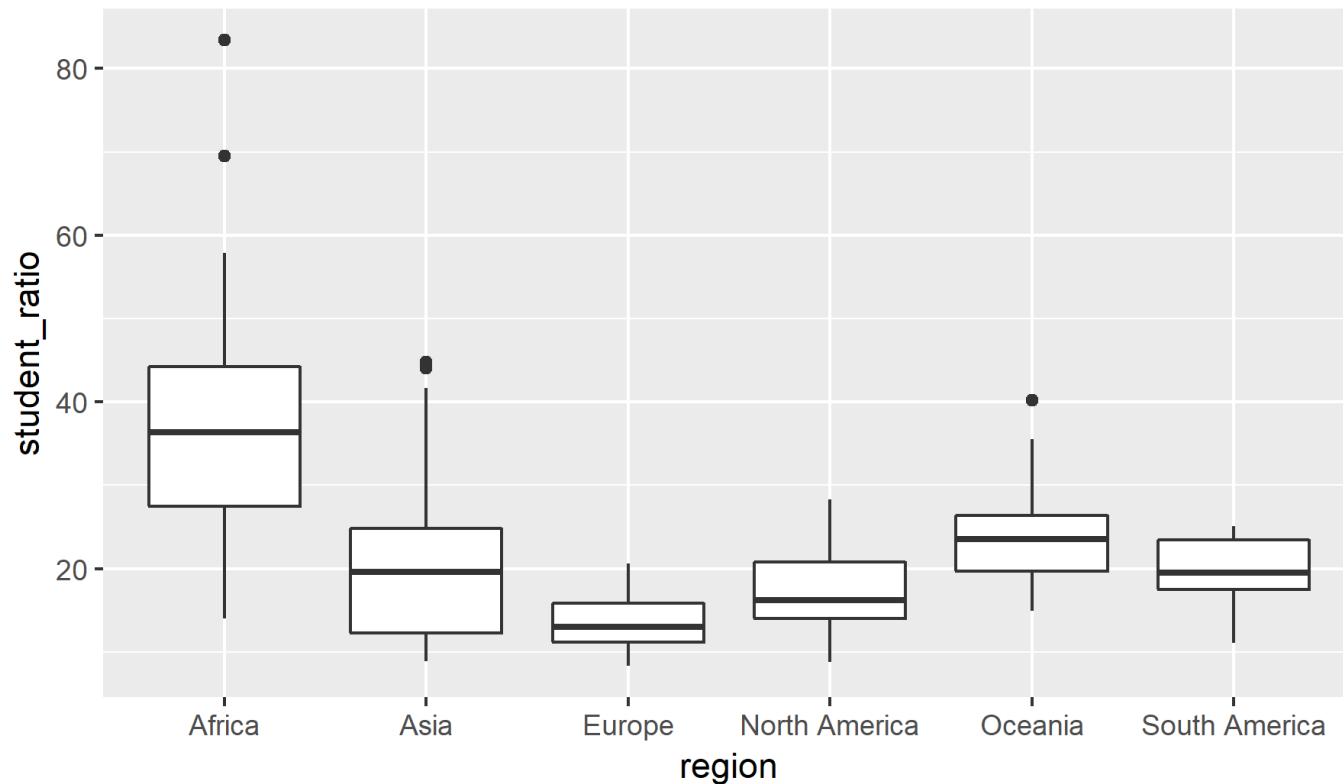


<https://www.learnbyexample.org/wp-content/uploads/r/rbarggplot02.png>



ggplot2

The Evolution of a ggplot



Data: UNESCO Institute for Statistics
Visualization by Cédric Scherer

<https://www.cedricscherer.com/2019/05/17/the-evolution-of-a-ggplot-ep.-1/>





CORRELAID

KONSTANZ

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