



Cannabis Data Science

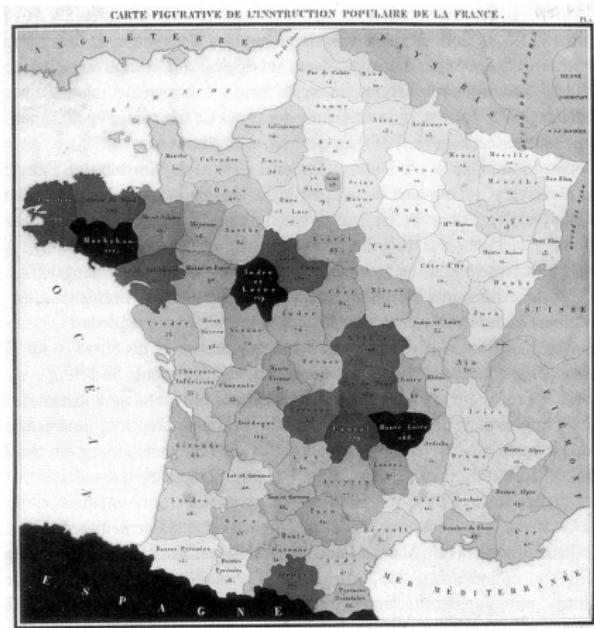
## Cannabis Data Science #54

February 23<sup>rd</sup>, 2022

## Now The Question of the Day is Prices

Do cannabis prices vary by geography (zip code) in Washington State?

Data maps (choropleths) were first used to visualize *moral statistics* on education, disease, crime, and living conditions.



1826 - The first choropleth, created by Baron Pierre Charles Dupin (1784-1873), depicts the availability of basic education in France by department.

1854–1858 - A map created by Dr. John Snow (1813-1858) depicting cholera cases in the London epidemics of 1854.

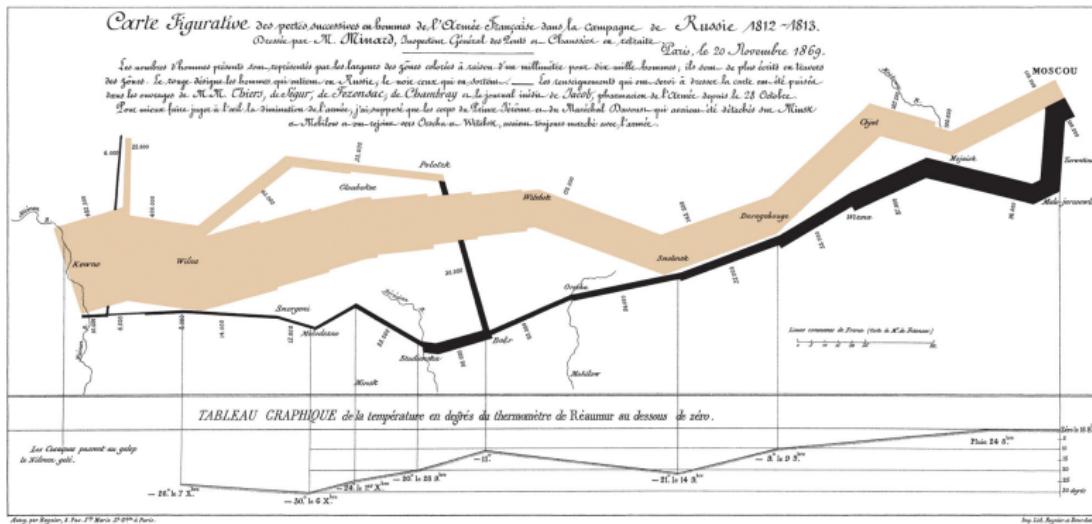


Fun fact: Dr. John Snow's research on cholera gave rise to the modern day difference-in-difference model<sup>1</sup>.

Designing Difference in Difference Studies: Best Practices for Public Health Policy Research  
Coady Wing et al., (2018).

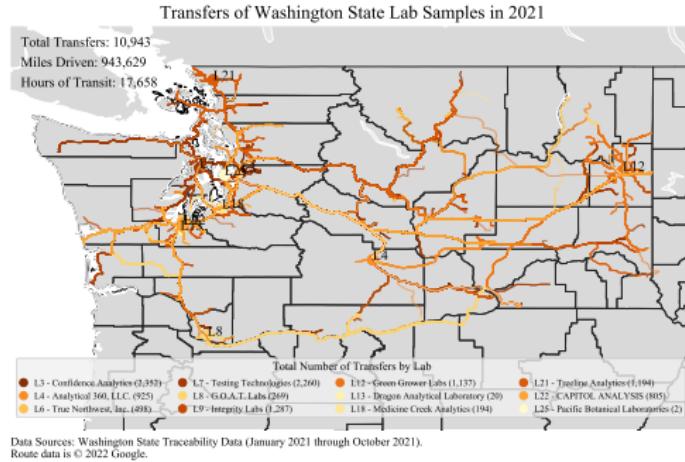
<https://doi.org/10.1146/annurev-publhealth-040617-013507>

1860 - Charles Minard depicts Napoleon's 1812 Russia Campaign.



# Topics in Spatial Analysis

- Spatial dependence, autocorrelation, and association;
- Spatial interpolation;
- Spatial interaction, simulation, modeling.





# Thank you for coming.

## Lessons of the Day

- Visualizing data can help uncover insights that were hiding in plain sight.