

Asking Good Research Questions with Data Visualization

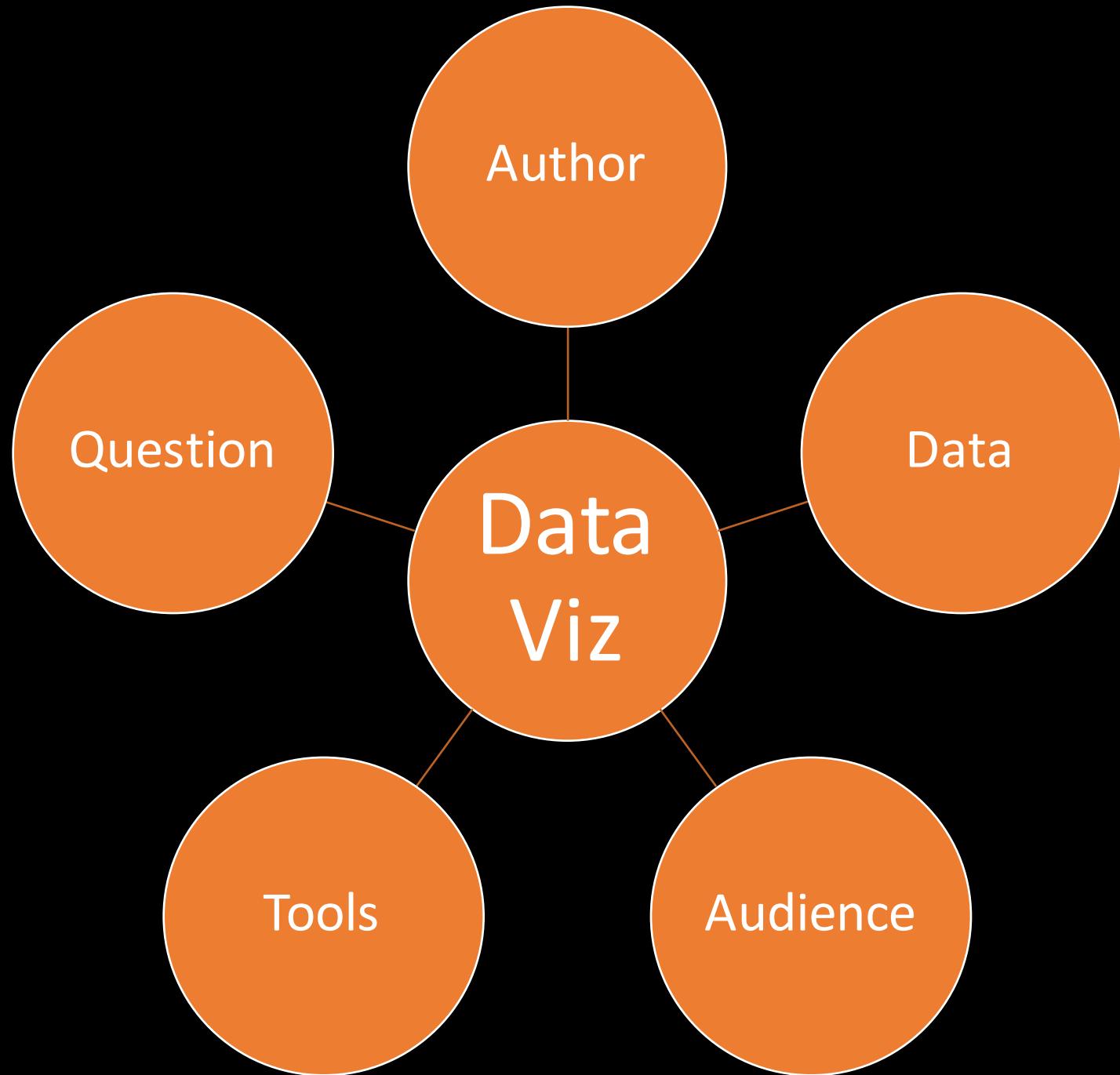
Introduction to Data Visualization

The Graduate Center at CUNY | Summer 2018

May 30, 2018

Five Minute Reflection

Given the drag and drop nature of Tableau and similar software, what roles (if any) do you think that people have in data visualization? What does the author bring to the process?



Which comes first: Data or
Questions?

Data

Question

Data

- Exploratory
- Experimental
- Introduces bias
- May not answer a question

Question

- Directed
- Focused
- Grounded
- Data may be unavailable

Iteration



Good Topics

- Intriguing
- Grounded in:
 - Experience
 - Theory
 - Research
 - Media

Good Data

- Relevant
- Specific (constrained or constrainable)
- Quantifiable
- Organized

Good Research Questions

- Specific
- Relevant
- Answerable
- Measurable
- Non-biased
- Open-ended
- Constrained

Reaching an Audience

- Or: Turning Research Questions into Stories
- How can people connect?
- Where is the hook?

Finding a Story

- Does an outlier provide interesting insight?
- A natural beginning or ending?
- Is there another way to aggregate the data?
- Inherent patterns? Time? Location?

- IPUMS CENSUS PERSON GENERATOR

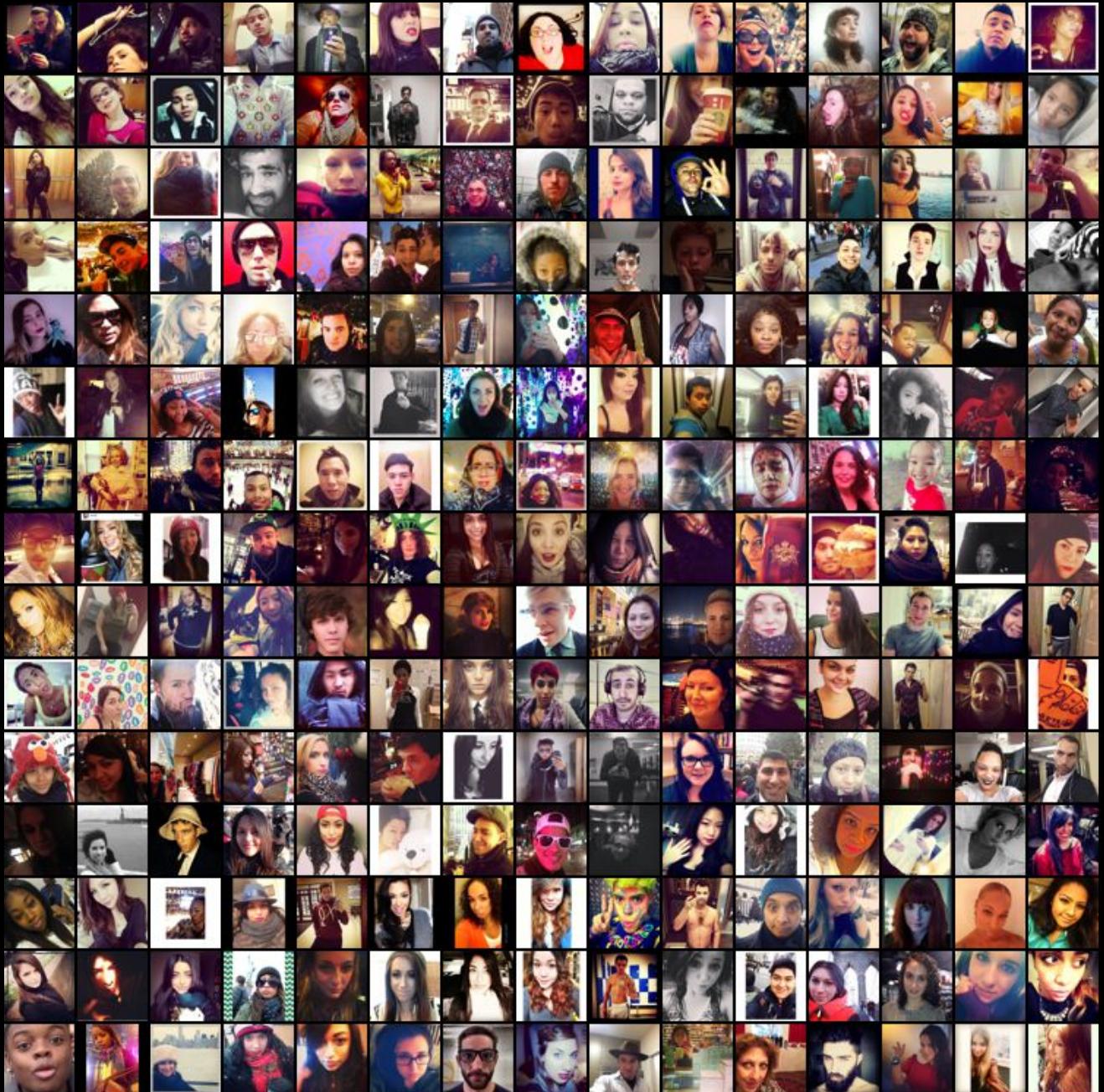
Abstractions

Abstraction

- https://public.tableau.com/profile/michelle.mcsweeney5354#!vizhome/shootings_1/Sheet1

Abstraction

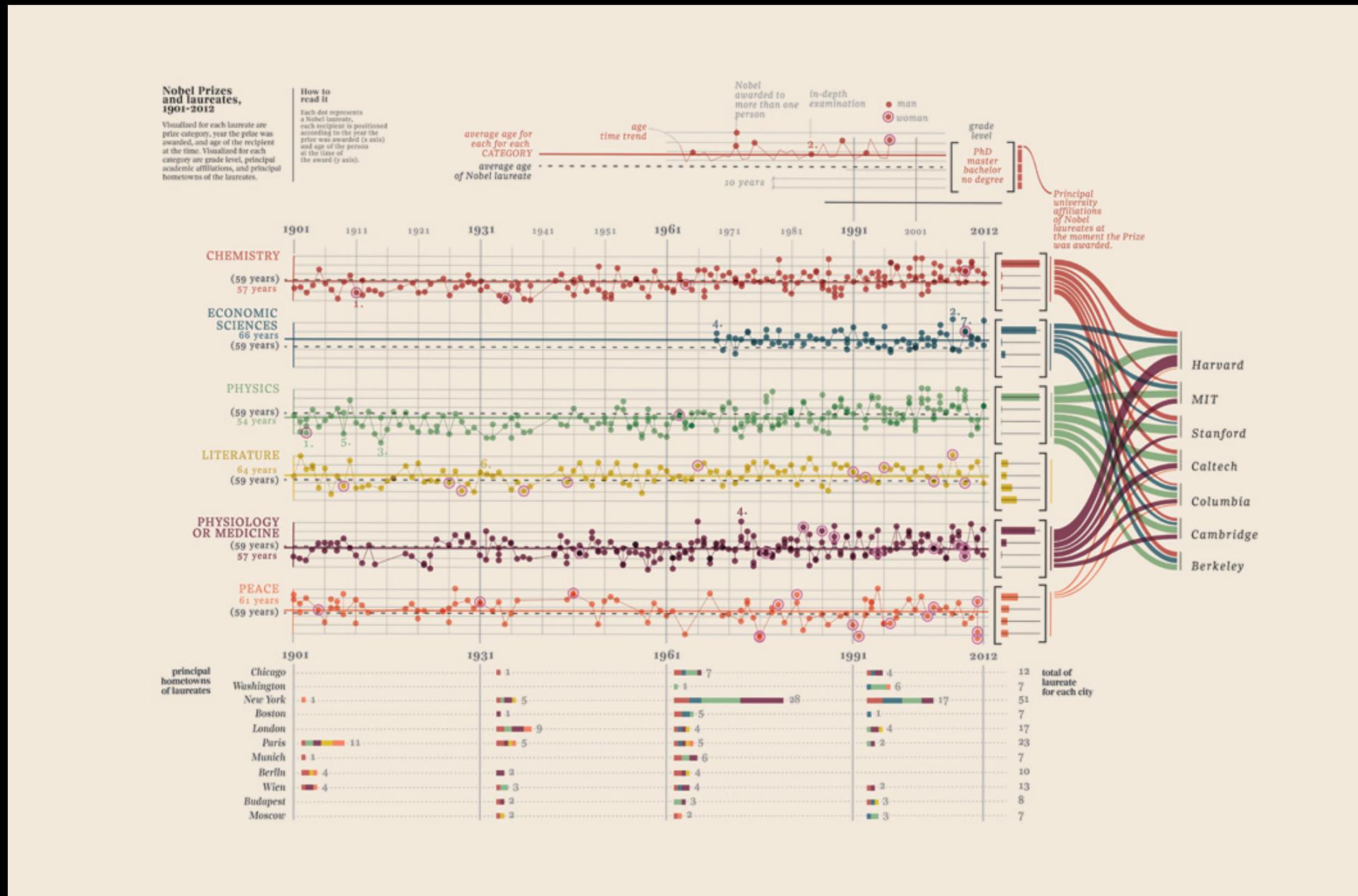
Selfie City, NYC



Abstraction

- https://centerforspatialresearch.github.io/colombia_site/applications/interactiveViz.html

Abstra- ction

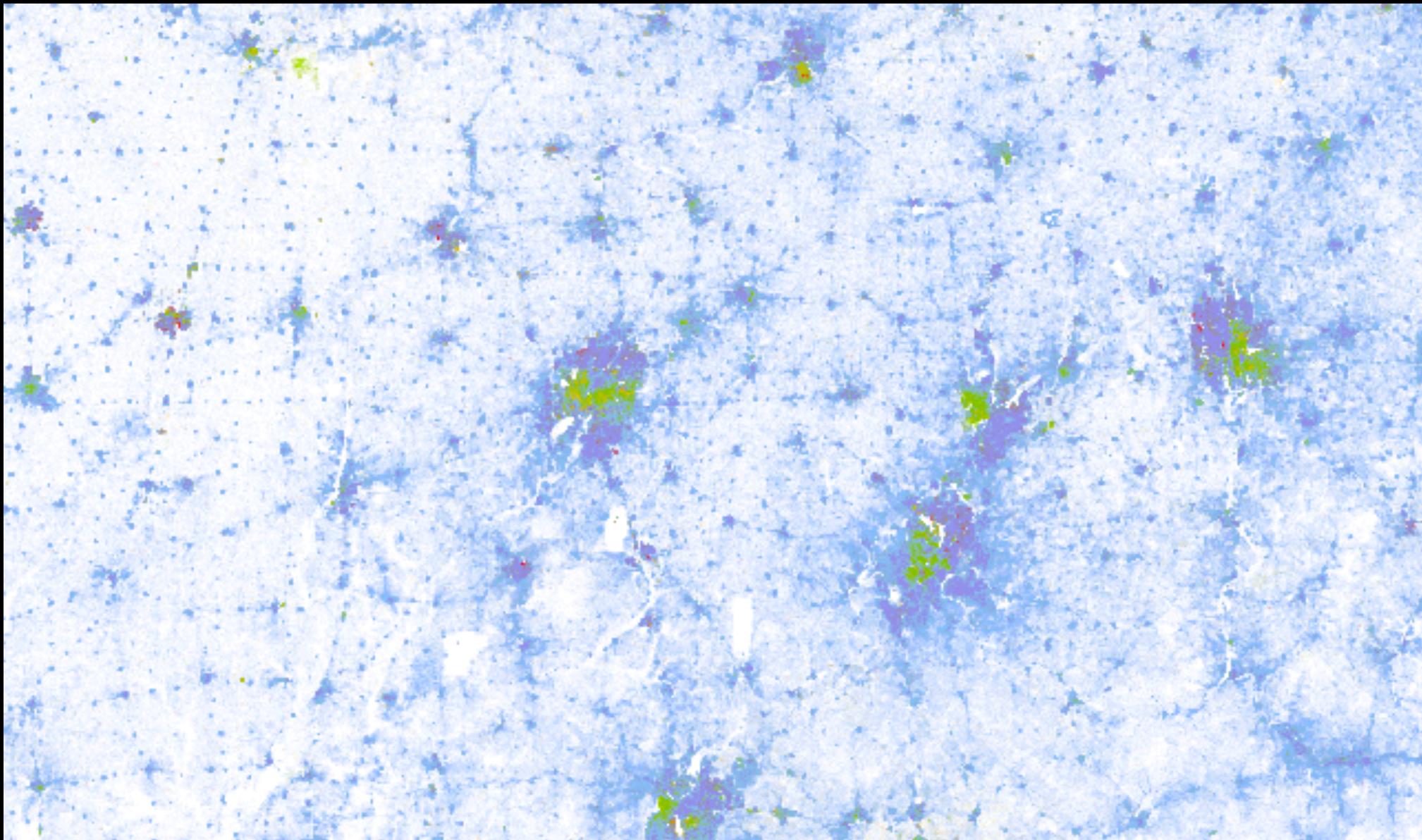


2012

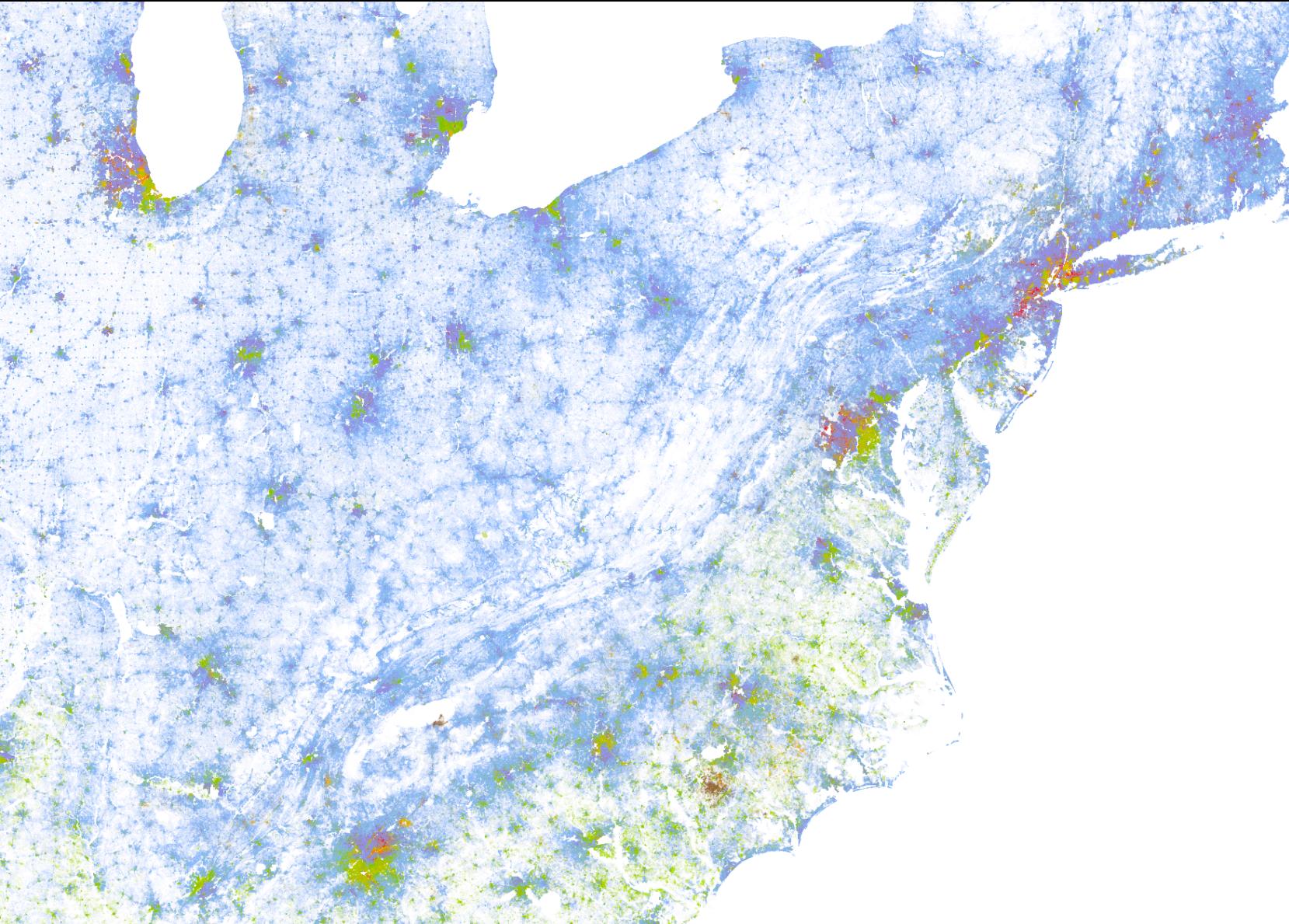
Design and production: [Accurat](#)

(Giorgia Lupi, Gabriele Rossi and Simone Quadri, with Davide Ciuffi, Federica Fragapane and Francesco Majno).

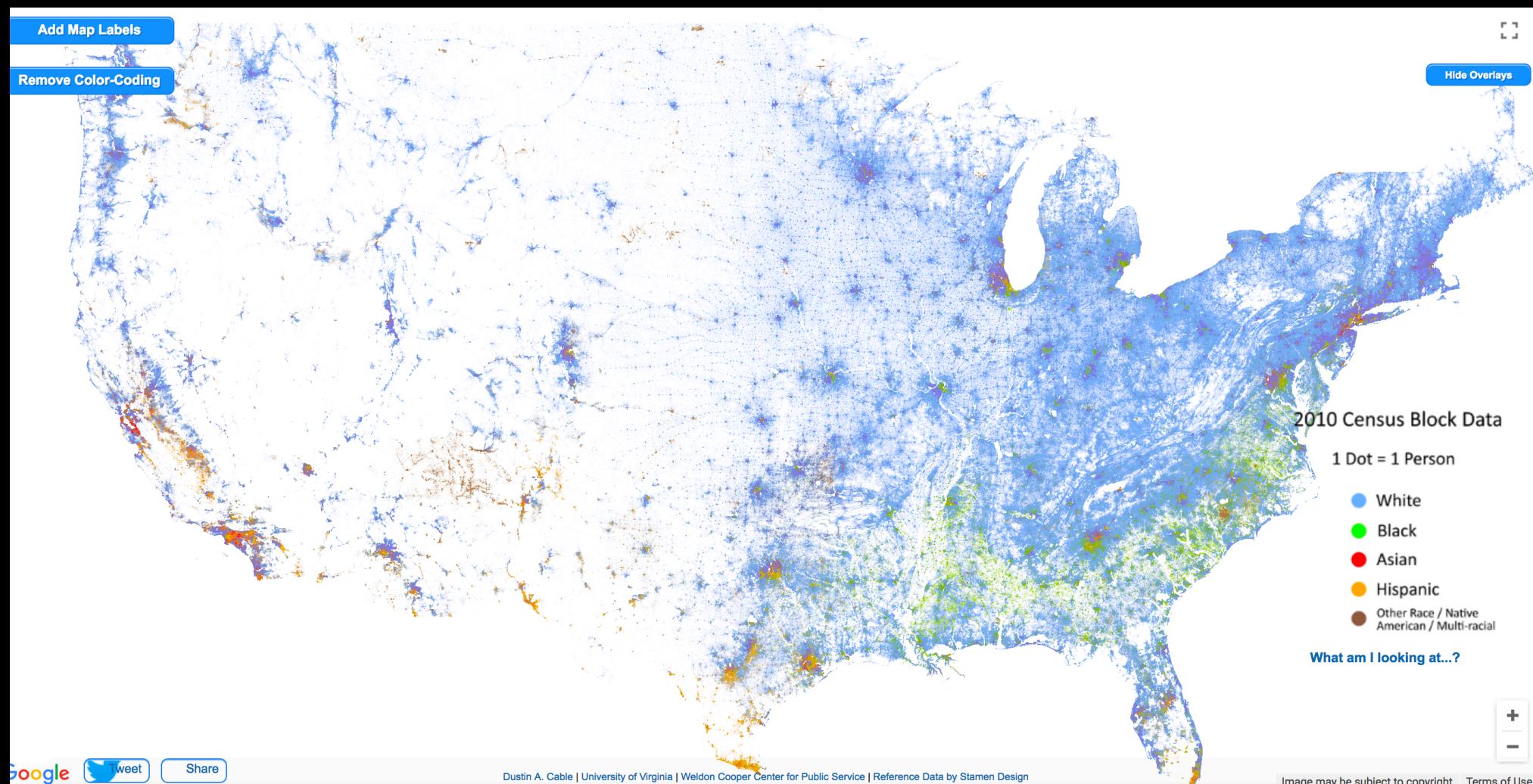
Context



Context



Context



Context

- <https://demographics.virginia.edu/DotMap/>

