NYT: 7/18 The Maps That Show That City vs. Country Is Not Our Political Fault Line

Midlands
Culturally pluralistic, founded by English Quakers. Ethnic and religious purity were never priorities; community-oriented and distrustful of government intervention.

Left Coast
New Englanders (by ship) and farmers, prospectors and fur traders from Appalachian Midwest (by wagon). Yankee utopianism meets individual self-expression and exploration.

Far West
Settlement largely controlled by corporations or government via deployment of railroads, dams, irrigation, mines; exploited as an internal colony, to the lasting resentment of its people.

Yankeedom
Puritan legacy; perfect earthly society with social engineering, individual denial for common good; assimilate outsiders; vigorous government to thwart would-be tyrants.

New Netherland
Dutch-founded; retains traits of 17th-century Amsterdam: a global trading culture; materialistic; multicultural; committed to tolerance and freedom of inquiry and conscience.

Tidewater
17th-century gentry recreated semi-feudal manorial society of English countryside. Conservative; respect for authority and tradition, not equality or political participation.

Deep South
Established by slave lords from English Barbados as a West Indies-style slave society. Modeled on slave states of the ancient world — democracy was the privilege of the few. Fights for rollbacks of federal power, taxes on capital and the wealthy, and environmental, labor and consumer protections.

El Norte
Borderlands of Spanish-American empire, far enough from Mexico City and Madrid to develop its own characteristics: independent, self-sufficient, adaptable and work-centered.

Greater Appalachia
Settlers from war-ravaged Ulster, northern England, lowland Scotland. Deep commitment to personal sovereignty and individual liberty; intense suspicion of external authority.

New France
Folkways of French peasantry blended with traditions of Algonquin-speaking people of what is now Eastern Canada. Down-to-earth, egalitarian, consensus-driven.

Spanish Caribbean
Legacy of the maritime component of Spain’s New World empire with hub in Havana. Includes Puerto Rico and other territories in Caribbean basin.
Compare this with the map on the previous page and observe the correlations.
LANDMARKS & PATHS
LINEDRIVE (2001)
AUTOMATIC GENERATION OF TOURIST MAPS (2008)
STREETSIDE VIEW (2010)
STREET LIGHT VIEW (2010)

Illumination of two apartments (above) compared with *illumination thumbnails* (below)

The difference in lighting is apparent on the thumbnail

- the first apartment area suffers from light occlusion at around noon, and again toward the evening
- the second apartment area is occluded only toward the evening, nearing 3pm

The buyer’s daily routine and preferences will decide which apartment to choose.

Elevation (topographic) map
CHOROPLETH MAPS

- Use colors/shadings to show data
- based on Greek words meaning “area/region” and “multitude”
- First in 1826 (by Charles Dupin)
  - Illiteracy in France
  - darker regions mean higher illiteracy
- Perception problems?
MORE CHOROPLETH MAPS

The Most Corrupt Nations

The index takes a number of factors into account, such as nepotism, prosecution of corrupt officials, and bribery.

Denmark has the world’s highest score on the index at 88.

Hong Kong is also ranked, with a score of 76.

There is a 43-point spread between neighbors Mexico and the United States.

Uruguay is South America’s least corrupt country, ranked 23rd in the world.

Botswana has the highest score on the continent of Africa.

The average score globally is 43.

2018 CORRUPTION PERCEPTIONS INDEX

2018 CORRUPTION PERCEPTIONS INDEX
Selected countries, by political system

THE WORLD’S POPULATION, CONCENTRATED

If the world’s 6.9 billion people lived in one city, how large would that city be if it were as dense as...

PARIS
519,040 square miles
339,230 square kilometers

SAN FRANCISCO
76.8 square miles
201.6 square kilometers

NEW YORK
356,918 square miles
926,391 square kilometers

LONDON
740 square miles
1,901 square kilometers

SINGAPORE
58 square miles
152 square kilometers

HOUSTON
2093 square miles
544 square kilometers

PER SQUARE MILE
ANCESTRY MAP

WHO KNEW GERMAN ANCESTRY WAS SO PROMINENT IN THE UNITED STATES?
KERRY VS. BUSH (2004)

2004 Popular Vote

- Bush: 62 million votes
- Kerry: 59 million votes

Amount of red and blue shown on map

- Bush: 2,500,000 mi²
- Kerry: 525,000 mi²

Hence the maps do not convey voter representation well.

Ideally the amount of colors would stand for the amount of votes.
The deep red down the center of this map highlights the president's support in sparsely populated areas.
KERRY VS. BUSH (2004) CORRECTED FOR POPULATION DENSITY

This map removes mostly uninhabited areas, revealing Mr. Bush's suburban and rural support in the East and South.
geographically accurate

graphically scaled by population gives a seemingly fairer visual representation of the “one man, one vote’ principle
geographically accurate

graphy scaled by population gives a seemingly fairer visual representation of the “one man, one vote” principle
KERRY VS. BUSH (2004) COUNTY LEVEL BY % MARGIN

geographically accurate

geography scaled by population gives a seemingly fairer visual representation of the “one man, one vote’ principle
seemingly even fairer visual in terms of ‘one man, one vote’
COLOR IS POWERFUL

Much of America is uninhabited
THE BRITISH HAVE INVADED ALMOST EVERY COUNTRY ON EARTH

RAILWAY SYSTEMS COMPARED
Chance all five people are wearing masks in five random encounters (New York Times)
UNFOLDING THE EARTH: MYRIAHEDRAL PROJECTIONS

https://www.youtube.com/watch?v=TMKaxQvJQp4

Unfolding the Earth: Myriahedral Projections

Jarke J. van Wijk
TU Eindhoven
The next slides use population-based distortion for various national parameters.
Spending on healthcare
Energy consumption
Greenhouse gas emission
Figure 1.8  Airlines' view of the United States.
Maps can be scaled to units other than distance. In this case, airline fares are used instead of miles or other linear units.

(Map copyright by the author.)
RECTANGULAR CARTOGRAMS

Makes it easier to compare sizes
RECMAP (2004)

Makes it easier to compare sizes
GRID MAP

States with bans on same-sex marriage*

States that allow civil unions or broad domestic partnerships, but not marriage

Makes it easier to compare spatial entities (here states) in terms of a binary variable.
Hexagonal shape allows for better (state) neighborhood encoding (has more sides)
COVID-19 DEATH RATE TRENDS
Mapping America: Every City, Every Block

Browse local data from the Census Bureau's American Community Survey, based on samples from 2005 to 2009. Because these figures are based on samples, they are subject to a margin of error, particularly in places with a low population, and are best regarded as estimates.

Distribution of racial and ethnic groups
FLOW MAPS

➤ First in 1837

➤ Transportation of Passengers in Ireland
Carte Figurative des pertes successives en hommes de l'Armée Française dans la Campagne de Russie 1812 - 1813.

Paris, le 20 Novembre 1869.

Les nombres d'hommes présents sont représentés par les longueurs des zones colorées à raison d'une millimètre pour dix mille hommes, ils sont de plus écrits en lettres des zénes. Le rouge désigne les hommes qui entrent en Russie, le noir ceux qui en sortent. Les renseignements qui ont servi à dresser la carte on été pris dans les ordonnances de M. Chriex, de Ségur, de Fessart, de Chambry et le journal médic. de Journal de l'Armée depuis le 23 Octobre.

Le mieux faire juger à l'aide la diminution de l'armée, j'ai supposé que le corps du Prince Nicolas et du Maréchal Davoust qui se trouvait détaché sur Minsk et Mokhlov et sub-rejeté vers Orsha et Minsk, arrivé toujours marche avec l'armée.

TABLEAU GRAPHIQUE de la température en degrés du thermomètre de Réaumur au dessous de zéro.

FLOW MAP LAYOUT (2005)
TIME-VARYING MAPS

12 a.m. Sunday

Penn Station
One of the busiest train stations in the world, and the busiest cab stand in the city.

Columbus Circle
Central Park, Whole Foods and Lincoln Center nearby.

Lower East Side
Comes alive after work, and throbs until well after midnight.

Bloomingdale's
Midday center for shopping.

Grand Central Terminal

Meatpacking District
Some Say New Wal-Mart Intrudes on Historic Mexican Pyramids
Oct 5, 2004, Mexico

The multinational retailer is building a discount supermarket 28 miles from one of Mexico's most treasured ruins. The pre-Columbian city's mighty pyramids, dedicated to the sun and moon, tower within view of the Bodega Aurrera, a Wal-Mart subsidiary.

User location:

San Jose (37.338208, -121.886328)
Seattle (47.603961, -122.329887)
100,000 GALAXIES, STRETCHING MORE THAN 500 MILLION LIGHT YEARS ACROSS
Map of Online Communities

Map of Online Communities and Related Points of Interest

Geographic area represents estimated size of membership

NOT A COMPLETE SURVEY. Sizes based on best figures I could find but involved some guesswork. Do not use for navigation.

Spring 2007
THIS ALWAYS BUGGED ME.
SOME MAP APIS

➤ leaflet API https://leafletjs.com/
➤ Folium API https://python-visualization.github.io/folium/